

UNIVERSITY OF OKLAHOMA
GRADUATE COLLEGE

MILITARY STRATEGY IN THE LATIN KINGDOM OF JERUSALEM:
THE CRUSADER FORTIFICATION AT CAESAREA

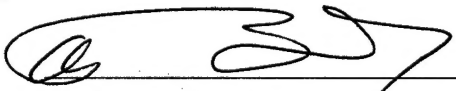
A THESIS
SUBMITTED TO THE GRADUATE FACULTY
in partial fulfillment of the requirements for the
degree of
MASTER OF ARTS

By
Daniel R. Moy
Norman, Oklahoma
1998

MILITARY STRATEGY IN THE LATIN KINGDOM OF JERUSALEM:
THE CRUSADER FORTIFICATION AT CAESAREA

A THESIS APPROVED FOR THE
DEPARTMENT OF HISTORY

BY


Robert Magnusson
Farland H. Stanley

©Copyright by Daniel R. Moy 1998
All Rights Reserved.

ACKNOWLEDGEMENTS

My thanks go to a handful of individuals who provided inspiration and guidance for this project. My advisor, Alfred S. Bradford, was the first to inform me about the Combined Caesarea Expeditions (CCE) and encourage my participation with the archaeological dig at Caesarea in 1997. Over the course of my studies at the University of Oklahoma, his counsel and instruction on military history in the ancient world greatly enhanced my appreciation for the significance of fortification studies. Farland H. Stanley, Jr., area supervisor on the Herodian platform at Caesarea, strongly supported my interest in archaeological exploration in Israel and inspired my labor describing, measuring, sketching, and photographing the Crusader fortification structures on the site. My committee member specializing in medieval studies, Roberta J. Magnusson, introduced me to the social, political, and military context surrounding the history of the Crusades. Her insightful lectures compelled me to investigate the primary source material and understand the significance of Caesarea through the eyes of those who lived, fought, and died there. In addition, my thanks go to the directors of CCE, Kenneth G. Holum and Avner Raban, and to my trench supervisors, Jerry M. Black and Jennifer Stabler, who readily adopted me into the Caesarea family and exposed me to the art of archaeology. Finally, special thanks to my mother, Loida, and my sister, Michelle, who traveled with me to Israel in 1998. They enthusiastically supported my exploration of the fortress at Caesarea and accompanied me through Palestine and Jordan to view the Crusader strongholds in those regions. They have always made hard work a lot of fun.

PREFACE

In the summer of 1997, at the beginning of my graduate work at the University of Oklahoma, I traveled to Israel and worked with the archaeologists of the Combined Caesarea Expeditions (CCE) in their study of Caesarea Maritima.¹ That season marked my first exposure to fieldwork investigating the material remains of ancient and medieval cultures in the Mediterranean. Located along Israel's seacoast, approximately sixty kilometers north of Jerusalem, Caesarea has a history spanning nearly fifteen hundred years. Although Herod the Great officially founded the port city just before the birth of Christ, foundations of occupation on the site reach back to Hellenistic Phoenicia in the third century BCE. Caesarea's later stratigraphic layers, generally contained within three meters of topsoil above the sandstone bedrock, represent the contributions of Herodian, Roman, Byzantine, Islamic, and Crusader settlement periods.

During the 1997 season my excavation efforts focused on exposing the architectural remains of Herod's temple to Roma and Augustus. In stark contrast to his monolithic sanctuary to Yahweh in Jerusalem, the temple at Caesarea, approximating the dimensions of the Parthenon in Athens, represented Herod's great pagan compromise and political self interest in seeking the patronage of Rome. The temple stood on an immense, semi-artificial podium raising the elevation of this monumental building above

¹ CCE is a consortium of universities committed to land and marine exploration of Caesarea's ancient and medieval past. Kenneth G. Holum from the University of Maryland and Avner Raban from the Hebrew University at Haifa currently serve as directors of the project, already in its tenth season at the site.

the rest of Caesarea's civic structures. Throughout subsequent periods of occupation, the temple platform served as the spiritual center of the city. The Byzantines used the Herodian temple foundations, already carved into the coastal bedrock, to form the octagonal outline for their church dedicated to the martyr St. Procopius. This magnificent structure approximated the scale and design of the Dome of the Rock in Jerusalem. With the expansion of Islam in the middle of the seventh century, the Muslims conquered Caesarea and converted the octagonal church into a great mosque. Nearly half a century later, the Crusaders invaded Palestine, captured the city, and reclaimed the temple platform for the greater glory of God. They selected an archbishop and transformed the mosque into a cathedral devoted to St. Peter. Investigating the architectural layers of these monumental structures afforded me an appreciation for the enduring history of Caesarea and its significance throughout the turbulent phases of its occupation. Especially intriguing was the way Caesarea's inhabitants had always fortified their city against enemies both foreign and domestic. These threats challenged the city's existence and motivated the citizens to seek innovative solutions in carved stone for their continued survival.

After my initial exposure to Caesarea, I prepared to return for the 1998 dig season with CCE to investigate the fortification structures at the site. Although I continued archaeological exploration on the Herodian platform, this time as an assistant trench supervisor, I also recorded data on the layout of Caesarea's fortification walls and military architectural features. Most of the visible structures on the site are of Crusader and Islamic origin. The wealth of architectural material from these periods led me to pursue a detailed description of the medieval fortress at Caesarea. One problem I

encountered during this process was discerning the lines between the various building phases. Almost all of the structures included fragments or had foundations predating their architectural addition to the city. Although posing a challenge for the dating and analysis of building features, deciphering these construction phases opened the door to a fuller understanding of fortification development. Caesarea's defensive structures evolved through the combined influence of preexistent stone construction and immediate military concern. For the Crusaders in particular, vital security issues afforded little time for designing and constructing a master planned community. Rather, they forged their castle in time of conflict to counter specific threats. To that end, they maximized their resources by recycling used stone, incorporating previous foundations, and modifying their techniques as the experience of Levantine warfare challenged and reshaped their Western paradigms of military architecture.

My description of the fortification incorporated the data provided by previous archaeological survey work and the measurements and observations I gathered at Caesarea. I did not attempt to catalog or analyze every feature on the site. Rather, I selected what I considered the most salient and best preserved examples of medieval defensive architecture. With sketchpad and meter tape in hand, I documented the composition and dimension of each of Caesarea's major fortification structures. In the process, I captured over seventy black and white photographs to illustrate my observations, many of which are included with my description of the fortress in chapter three. Attempting to decipher and reconstruct the Crusader fortress based on the ruins in situ presented a creative challenge. In some cases, as with the archer's loopholes and arrow slits, I took sample measurements on the preserved sections which I generalized

and applied to the non-existent portions of the walls and towers. I followed the same procedure in seeking to describe the construction of the curtain walls. Only two small sections of the ten-meter walls remained in situ. I also generalized the description of the projecting towers using selected examples on the eastern wall which provided the best remaining ruins of these structures.

In addition to my exposure to Caesarea, I traveled throughout Israel and Jordan investigating the remains of other Crusader strongholds. General analysis of major garrisons, including Acre, Belvoir, Kerak, and Montreal (Shawbak), revealed significant parallels in defensive architecture of the period. Examining the loopholes and climbing through the towers and posterns at Belvoir heightened my understanding of these structures. In addition, the wall-head battlements at Kerak and Montreal afforded the architectural analogs necessary to reconstruct such features at Caesarea for which little archaeological evidence remains.

While attempting to reconstruct the history of the Crusader fortress at Caesarea, I supplemented the physical description of the site with a thorough summary of the primary literary sources. These writers included both Crusader and Muslim chroniclers who described the major siege operations and construction efforts throughout the city's medieval history. Among these were such notables as Fulcher of Chartres (1059-1127) who left France and accompanied Stephen of Blois and Baldwin on the First Crusade. He later became canon of the Holy Sepulcher in Jerusalem and wrote his *Historia Hierosolymitana*, a history of the expedition to Jerusalem covering the period 1095-1127. William of Tyre (1130-1186), another Frankish (perhaps Italian) chronicler, was born in the Levant. Known for his extensive history of the earlier Crusades and the

Kingdom of Jerusalem, William served both as chancellor of the realm and archbishop of Tyre. Jean de Joinville, vassal and biographer of Louis IX (St. Louis), was another important commentator on the story of Crusader Caesarea. Joinville documented Louis' exorbitant fortification on the site in the middle of the thirteenth century. Besides these Frankish writers, I also gained valuable insight from the Muslim perspective. Ibn al-Furat vividly recorded the siege of Baybars at Caesarea in 1265, incorporating significant detail concerning the structure of the citadel and the dismantling of the fortification.²

The combination of archaeological and literary evidence afforded sufficient data with which to reconstruct the shape and context of the Crusader fortress at Caesarea. Using these findings, I sought to advance a case study for examining the value of fortified cities in the Latin Kingdom of Jerusalem. In this paper, my discussion of military strategy in chapter five supports the argument that fortifications were vital to Crusader survival in Palestine. As I describe in chapter two, contemporary scholars have already promoted this understanding of medieval warfare in the Levant. Rather than offering a new interpretation of military architecture, my contribution to the historiography provides a unique, detailed look at a specific garrison and its strategic role during the Crusades. In the process, I examine and illustrate the dynamics shaping the history of military operations in the Latin Kingdom and lend support to the current scholarship on medieval fortification study.

² Joseph R. Strayer, ed., "Fulcher of Chartres" and "William of Tyre," in *Dictionary of the Middle Ages*, 1989.

TABLE OF CONTENTS

List of Illustrations	xi
Abstract	xiv
Chapter	
1. INTRODUCTION	1
2. THE STUDY OF CRUSADER FORTIFICATIONS	15
3. THE FORTIFICATION AT CAESAREA	26
4. THE TIMELINE OF CRUSADER OCCUPATION AT CAESAREA ..	75
5. MILITARY STRATEGY IN THE LATIN KINGDOM	101
6. CONCLUSION	138
Bibliography	142

LIST OF ILLUSTRATIONS

All photographs by the author.
All drawings by the author except where noted on page.

Figure	Page
1. The Latin Kingdom of Jerusalem	3
2. Caesarea City Phases	7
3. Richard Pococke's Map of Caesarea	27
4. Conder and Kichener's Map of Caesarea	27
5. Crusader Caesarea Top Plan	31
6. Crusader Caesarea Reconstruction	32
7. Partially Preserved Section of South Wall	34
8. Remains of Northwest Corner Wall and Tower	34
9. West line of the Crusader Fortress	34
10. Curtain Wall Ashlar and Rubble Construction	36
11. Arrow Slit Inside Archer's Loophole	36
12. Section of South Wall	36
13. Face of South Wall Section	36
14. Archer's Loophole	37
15. Medieval Crenellation	37
16. Seal of Gautier I, Lord of Caesarea 1123-1149	37
17. Curtain Wall Architecture	41
18. Remains of Curtain Wall	41

19. Crusader Phasing in Curtain Wall at East Gatehouse	42
20. Crusader Street and Building Foundations	42
21. Granite Columns in Wall of East Gatehouse	42
22. East Wall Moat and Counterscarp	42
23. Projecting Tower Top Plan	48
24. Projecting Tower Elevation	48
25. Projecting Tower Profile	48
26. Southeast Tower Top Plan	50
27. Southeast Tower Elevation	50
28. East Postern Top Entrance	52
29. East Postern Moat Entrance	52
30. South Postern Top Entrance	52
31. South Postern Moat Entrance	52
32. South Postern Interior	53
33. North Postern Top Entrance	53
34. Approach to East Gatehouse	53
35. Drawbridge Across East Moat	53
36. East Gatehouse Top Plan	55
37. Entrance to East Gatehouse	57
38. East Gatehouse Marble Threshold and Hinge Socket	57
39. East Gatehouse Portcullis	57
40. East Gatehouse Hall Interior	57
41. East Gatehouse Balcony Defensive Position	58

42. Arrow Slit Inside Archer's Loophole	58
43. East Gatehouse Upper Balcony	58
44. City Gate Opening from East Gatehouse	58
45. Remains of North Gatehouse	61
46. Remains of Supply Gate Bridge	61
47. Approach to South Gate	61
48. Entrance to South Gate	63
49. Interior of South Gate	63
50. South Gate Hinge Sockets and Portcullis	63
51. Inner Harbor	63
52. Breakwater of Granite Columns	64
53. Crusader Harbor Architectural Features	64
54. Citadel	64
55. Exposed Foundations of Citadel Moat and Fortification Wall	67
56. Section of Citadel Tower	67
57. Citadel Foundation Inside Harbor Basin	67
58. West Façade of Herodian Platform	69
59. Remains of Cathedral of St. Peter	69
60. Citadel and Inner Harbor from Herodian Platform	69
61. Vaulted Cistern	72
62. Low-Level Aqueduct	72
63. High-Level Aqueduct	72
64. Crusader Caesarea Timeline	79

ABSTRACT

Caesarea was a fortified city along the coast of Palestine, conquered and held by the Crusaders from 1101 to 1265. This study takes the reader to the archaeological remains of the site and provides a thorough examination of the defensive structures constructed throughout the history of the Crusader period. Combining both Christian and Muslim primary source materials with the archaeological evidence, the author reconstructs the history of the fortress and develops the context of the social, political, economic, and military issues shaping the architectural features present at Caesarea. Moving from specific observation of the case study to general analysis of overall Crusader military strategy, the author lays the foundation for conclusions concerning the vital importance of fortifications in the Latin Kingdom of Jerusalem. Introducing the discussion with a brief historiographical essay, the author reveals his approval of recent strides in fortification studies to argue for the centrality of the garrison in medieval warfare. His thesis demonstrates that fortresses like Caesarea served both essential military and non-military functions, enabling the Franks to persist in their occupation of the Latin Kingdom. As siege warfare dominated the later half of Crusader period, the fortress played an increasingly significant role in the Franks' attempt to hold territory in the Levant. Outnumbered and overwhelmed by the surrounding Muslim powers, Frankish reliance on fortifications revealed the absence of any true military strategy capable of sustaining European sovereignty in Palestine. It represented the Crusaders' struggle to use walls of stone to survive in a land they tried to rule but could never adequately control.

INTRODUCTION

The most striking expression of the surge of military and economic aggression of the Christian West in the late eleventh and early twelfth centuries was the establishment by the armies of the First Crusade of the Kingdom of Jerusalem, . . .¹

At Clermont in 1095, Pope Urban II proclaimed and launched the beginning of a holy war to restore the dignity and authority of Christendom in the East. In practical terms, Urban sought to rescue the Eastern Orthodox Church and the sacred cities from Muslim domination and control. Freeing the Holy Sepulcher and its patron city, Jerusalem, were foremost on the agenda.² However, much of the Holy Land had been under Muslim control since 640. Urban's rhetoric disregarded four hundred years of Arab settlement and summoned an enterprise of far greater dimension than a mere restoration of sacred sites. Ultimately, the idea of Crusade mandated full-scale invasion of a foreign land, conquest of its population centers, and permanent colonization by a Western European power. Within four years of the proclamation, after a long and arduous journey across Europe and Asia Minor, the first Crusaders laid siege to Jerusalem. On July 15, 1099, the Franks captured the city and founded the Latin

¹ John H. Pryor, *Geography, Technology, and War: Studies in the Maritime History of the Mediterranean, 649-1571* (Cambridge: Cambridge University Press, 1988), 112.

² J.R. Tanner, ed., *The Cambridge Medieval History*, vol. 5 (Cambridge: Cambridge University Press, 1968), 265.

Kingdom of Jerusalem, venturing on a campaign of foreign occupation and settlement that spanned nearly two centuries.³

Following the siege of Jerusalem and restoration of the Holy Sepulcher, the Crusaders realized territorial conquest was only the first step toward establishing Western control of the Levant. In order for their military efforts to achieve any lasting result, settlement of the acquired lands had to follow. Without Frankish control over the region, the Christian holy sites would fall back into the hands of the Saracens after the Crusading army returned home. Beyond military concerns, the knights who joined the First Crusade were prepared to support the establishment of a Latin colony in the Middle East for personal reasons. These would-be feudal lords hoped to promote their wealth and position by securing titles to the conquered lands. To that end, the Franks imported their Western system of feudal organization to the Levant. With Jerusalem as the established capital, the first ruler, Godfrey de Bouillon, and his successor, King Baldwin I, divided the territory into fiefs, awarding hereditary tracts of land to their nobles. These land grants delegated military and administrative responsibility for control of the native Muslim and Syrian Christian population to the fief holders.⁴

Although frontier boundaries fluctuated considerably throughout its two hundred-year history, the Latin Kingdom reached the height of expansion during the first quarter of its existence in 1160 (Fig. 1). Its territory spanned the Mediterranean coast

³ I use the term "Latin" referring to those agents and agencies acting under the direction of the Roman Catholic Church (as opposed to the Eastern Orthodox). Although many different ethnic Europeans participated in the Crusades, I use the term "Frank" commonly since the majority of the participants, including the lords and kings, were from France. In the course of this paper, "Latin," "European," "Frank," and "Western" are generally interchangeable terms.

⁴ Meron Benvenisti, *The Crusaders in the Holy Land* (Jerusalem: Israel Universities Press, 1970), 11-15.

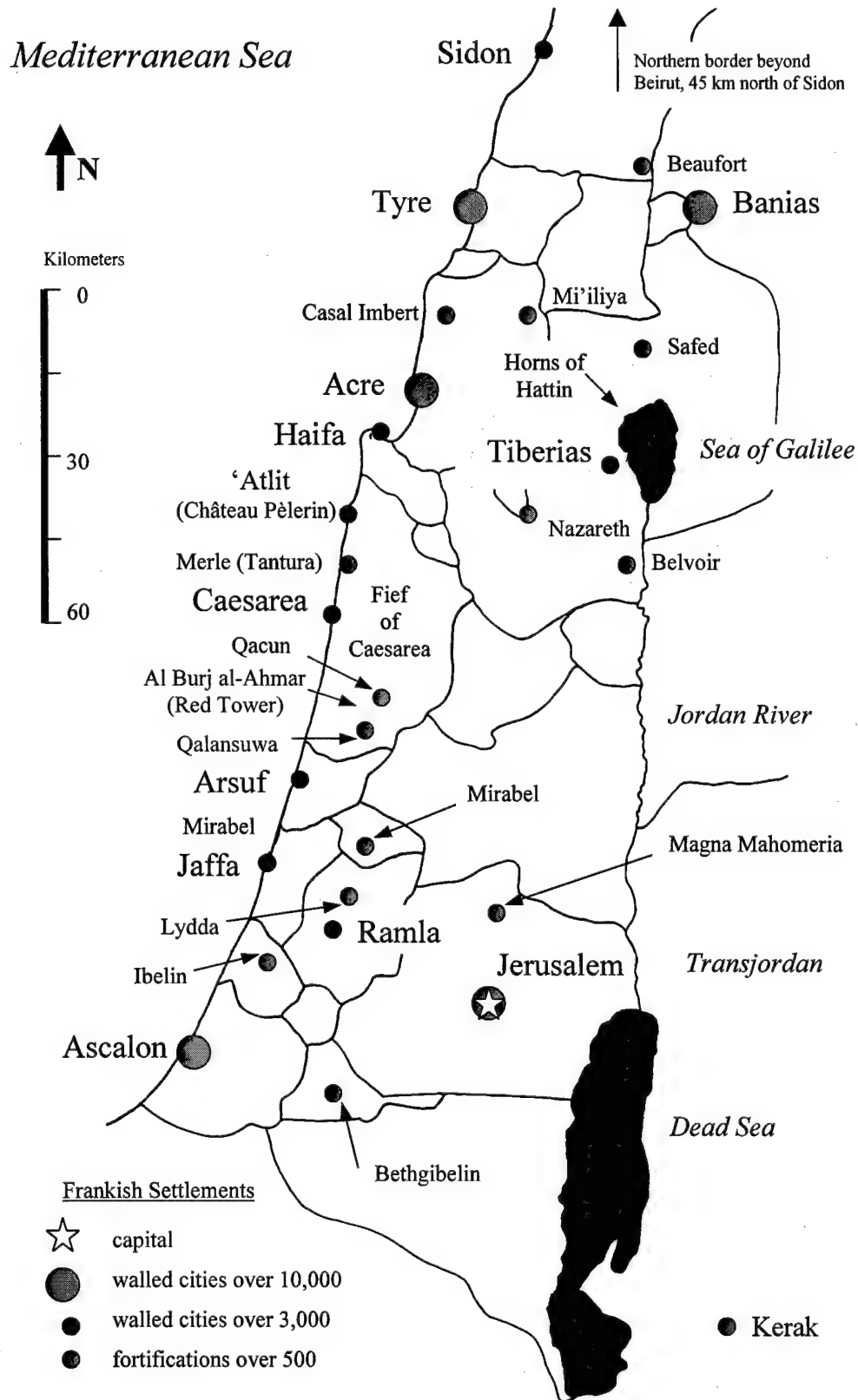


Figure 1. The Latin Kingdom of Jerusalem. Map data based on Benvenisti, *Crusaders in the Holy Land*.

from Ascalon in the south to the Mu'amiltain River near Beirut, a point some forty-five kilometers north of Sidon. The eastern border roughly followed the dramatic topography of the Rift Valley, the great barrier separating the coastal plains from the Arabian frontier. Sections of this eastern boundary extended east of the Jordan River, into what the Franks referred to as *Terre oultre le Jourdain* (Transjordan), from Banias in the north to the desert fortress at Kerak in the south. Although the region of the southern desert remained unsettled, the southern tip of the kingdom stretched as far as Eilat in the Gulf of Aqaba.⁵

Military activity in the early phases of Crusader occupation concentrated on securing the fortresses along the Mediterranean coast. King Baldwin I and his lords understood that the survival of the kingdom depended on open communication and supply with their Western patrons. Most of the original Crusaders returned home after the capture of Jerusalem, leaving the Franks with insufficient manpower to occupy and control the territory. Colonizing the Levant required a steady inflow of settlers, military personnel, and maritime trade to support the infrastructure of the kingdom. Ensuring the uninterrupted visitation of sea-traveling pilgrims to the Holy Land was critical in meeting these requirements. In addition, the seaports, while under Arab control, threatened to serve as beachheads for Muslim naval invasion by way of Egypt. Concern over these security issues prompted Baldwin to launch a campaign through the maritime plains within one year of his coronation in 1101. Within a decade, he captured all of the coastal fortresses except Ascalon and Tyre.⁶

⁵ Benvenisti, *Crusaders in the Holy Land*, 11.

⁶ Pryor, *Geography, Technology, and War*, 112-115.

Caesarea, the ancient coastal city founded by Herod the Great, fell to Baldwin following his siege of the Muslim-held fortress in 1101. It was one of the important strategic points along the Mediterranean. The king established the fortification and surrounding territory as one of the largest of twenty-seven fiefs in the Latin Kingdom, naming Eustace Granier as its first lord. Situated sixty miles northwest of Jerusalem, Caesarea commanded a region of five hundred square miles on the rich agricultural land of the Sharon plain. Roman aqueducts supplied an abundance of fresh water to the city inhabitants and for the fertile grain fields and fruit orchards. At its peak, the city grew to a population of five thousand, comprised of Frankish, Syrian Christian and Muslim residents.⁷ Although its seaport had declined since the time of Herod's legendary harbor, the Crusader anchorage afforded economic benefits, opening the abundant agricultural production of the area to maritime trade. In addition to the harbor, Caesarea's fortification structures were an exceptionally valuable asset of the site. Even before the Crusaders added their own modifications, the Arabs recognized the city for its stalwart defenses, "symbolizing the whole might of Christian and Byzantine power in Palestine."⁸ Muslim chroniclers described the walls as "impregnable," and Caesarea was the last bastion to fall to Arab conquest during the Muslim invasion of 640.⁹ Easily acquired building materials contributed to the fortification's success. The local topography included ridges of kurkar, a marine sandstone forming the cliffs along the

⁷ Benvenisti, *Crusaders in the Holy Land*, 137.

⁸ E. Van Donzel, ed., "Kaysariyya," in *The Encyclopedia of Islam*, 1978.

⁹ The Muslim geographer, al-Maqdisi (985). Harry W. Hazard, "Caesarea and the Crusades," *Studies in the History of Caesarea Maritima*, ed. Charles T. Fritsch, Bulletin of the American Schools of Oriental Research Supplement Series 19 (Missoula: BASOR, 1975), 79.

sea.¹⁰ This natural resource provided unlimited material for stone cutting and construction. In addition, the city's long history of building and destruction over centuries of Roman and Byzantine occupation provided a ready supply of pre-made kurkar stone, as well a wealth of usable granite and marble architectural fragments.¹¹

Baldwin's men constructed the fortress at Caesarea on the foundations of the Muslim city they conquered in 1101 (Fig. 2). The new Frankish defenses were the climactic chapter in the city's fifteen hundred-year history of military fortification. Over the centuries, Caesarea's strategic significance compelled the military engineers of previous civilizations to occupy and defend the site. The earliest literary source was a reference in a papyrus composed by Zenon, finance minister working on behalf of the Ptolemaic king of Egypt in 259 BCE.¹² In that year, Zenon visited the site, known in the days of Phoenician occupation as "Strato's Tower," a port city named for its colonial connection to the king of Sidon.¹³ Jewish sources described Strato's Tower as a fortified Hellenistic town, and archaeologists have found limited evidence indicating the location of its defensive wall.¹⁴

¹⁰ Denys Pringle, *The Red Tower: Settlement in the Plain of Sharon at the Time of the Crusaders and Mamluks, AD 1099-1516* (London: British School of Archaeology in Jerusalem, 1986), 5.

¹¹ "A castle destroyed in a castle half-remade"—A familiar building theme of the period, according to William of Tyre, indicating the advantage provided by older building material. Denys Pringle, "Crusader Castles: The First Generation," *Fortress* 1 (May 1989): 14.

¹² P Cairo Zeno 59004. Eric M. Meyers, "Caesarea," in *The Oxford Encyclopedia of Archaeology in the Near East*, 1977.

¹³ *Strato* is derived from the Greek form of the Phoenician word *Abdastart*, meaning "slave of Abdastart." Two Sidonian kings were named Abdastart, the first dating to approximately 350 BCE. Avraham Negev, *Caesarea* (Tel Aviv: E. Lewin-Epstein, 1967), 6.

¹⁴ In the Hebrew sources, Strato's Tower was known as *Migdal Shorshon*. Avner Raban, of Hebrew University at Haifa, has outlined what he believes to be the fortification walls of Strato's Tower. Avner Raban, "In Search of Strato's Tower," in *Caesarea Papers: Straton's Tower, Herod's Harbour, and Roman and Byzantine Caesarea*, ed. Robert L. Vann, *Journal of Roman Archaeology Supplementary Series* 5 (Ann Arbor: University of Michigan, 1992), 7-22.

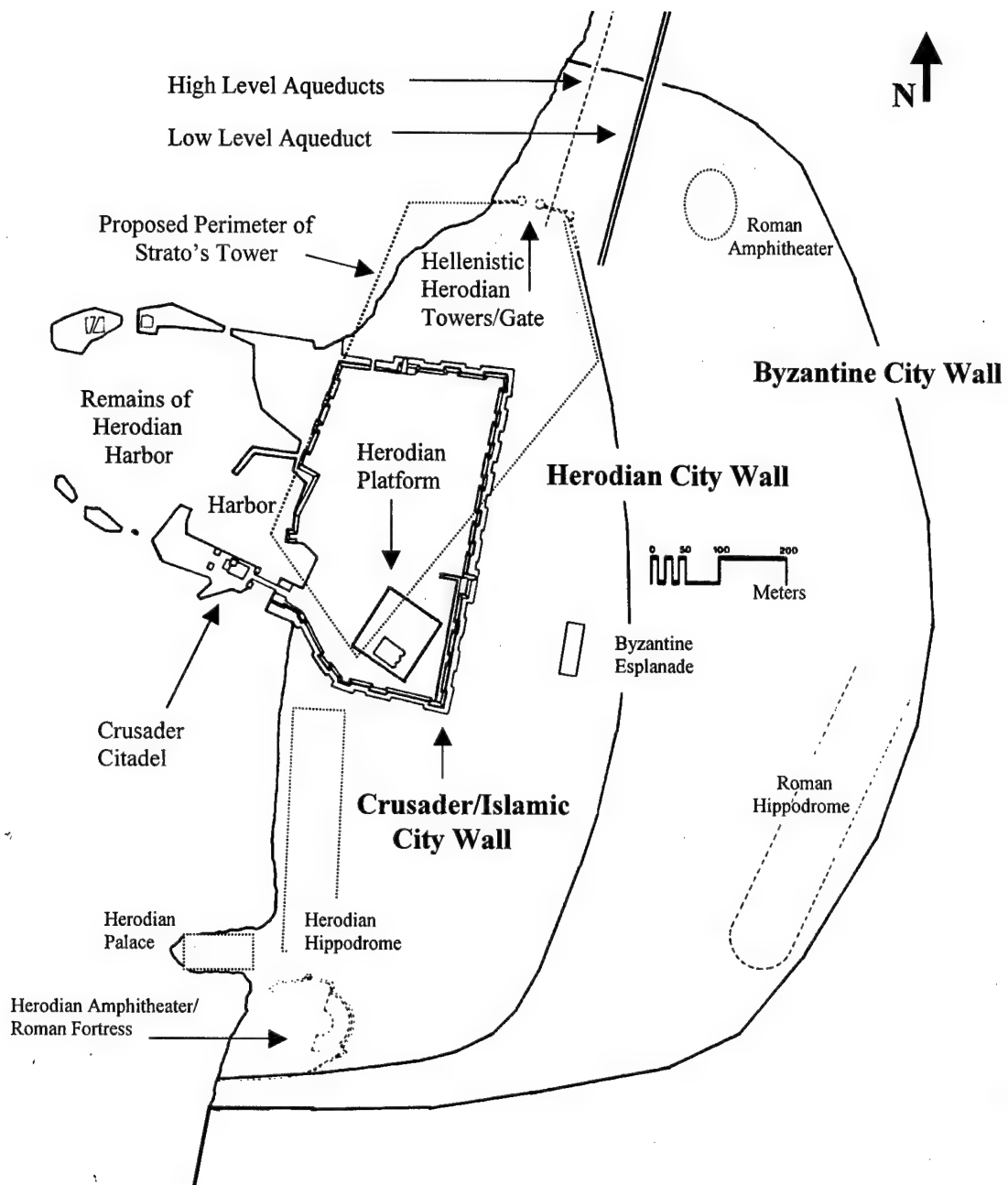


Figure 2. Caesarea City Phases. Based on diagrams in Vann, *Caesarea Papers* and *The Oxford Encyclopedia of Archaeology in the Near East*.

The first major period of fortification began around 10 BCE, when Herod the Great chose the former site of Strato's Tower as the location for his new master planned port city dedicated to the Roman Emperor, Caesar Augustus. According to Josephus,

And when he observed that there was a place near the sea, formerly called Strato's Tower, which was very well suited to be the site of a city, he set about making a magnificent plan and put up buildings all over the city, not of ordinary material but of white stone. He also adorned it with a very costly palace, with civic halls and—what was greatest of all and required the most labor—with a well-protected harbor, . . .¹⁵

For the whole sea-board from Dora to Joppa, midway between which the city lies, was without a harbour, so that vessels bound for Egypt along the coast of Phoenicia had to ride at anchor in the open when menaced by the south-west wind; . . . However, by dint of expenditure and enterprise, the king triumphed over nature and constructed a harbour larger than the Piraeus, . . .¹⁶

In a circle round the harbour there was a continuous line of dwellings constructed of the most polished stone, and in their midst was a mound on which there stood a temple of Caesar, visible a great way off to those sailing into the harbour, which had a statue of Rome and also one of Caesar. The city itself is called Caesarea and is most beautiful both in material and in construction.¹⁷

Herod supplied Caesarea with all the customary Roman civic features, including a monolithic, raised-platform temple dedicated to Roma and Augustus, an aqueduct to supply water for public fountains and baths, a hippodrome for the games, amphitheater, and residential palace. However, Herod's greatest achievement was the man-made harbor, a massive engineering feat requiring the use of hydraulic concrete and construction of breakwaters in the open sea. The creation of the seaport demonstrated Herod's resolve to place Caesarea at the center of Judean commerce and prestige. The city's fortification wall extended the boundary of Strato's Tower considerably, and

¹⁵ Josephus, *Antiquities*, XV, 331-332.

¹⁶ The *Piraeus*, referring to the port city of Athens. Josephus, *War*, I, 409-410.

¹⁷ Josephus, *Antiquities*, XV, 339-340.

under Roman occupation, served primarily as a defense against provincial domestic disturbances.

Following the Herodian period in 6 CE, the Romans assumed direct control over the Judean province and established Caesarea as their administrative capitol. Although the city's fortifications remained relatively unchanged, the Jewish rebellions of the first century greatly magnified their strategic importance. Two Roman emperors brought their armies to Caesarea during this period. Following a massacre of twenty thousand Jews at Caesarea in 66, an incident which triggered the start of the Jewish War, Vespasian made Caesarea his base camp for putting down the revolt. He quartered two of his legions there, over ten thousand Roman soldiers. In return, the emperor awarded Caesarea status as a Roman colony, granting citizenship rights to the inhabitants. In 130, during the Bar Kokhba revolt, the emperor Hadrian also invested in Caesarea's infrastructure, ordering expansion of the city's aqueducts. Hadrian's legions left stone plaques on the aqueduct commemorating the emperor's construction at Caesarea.¹⁸ The emperor also had a temple built to himself and received honorary title as founder of the city.

Caesarea's defensive wall expanded to its greatest perimeter during the late Roman/Byzantine period from 324-640. Although this rubble and mortar barricade was moderate in height and width, its length of 2,500 meters enclosed an area twice the size of Herod's city, suggesting a dramatic increase in population from the early Roman years. The fact that military architects reconstructed Caesarea's fortification wall during

¹⁸ There are nine such plaques. One reads, *Imperator Caesar/Traianus Hadrianus Augustus/per vexillationem/legionis VI Ferratae*; "Emperor Hadrian—through a detachment of the 6th Legion—(nicknamed) Old Ironsides." The other plaques mention Hadrian and the 10th and 2nd Legions. Kenneth G. Holum, *King Herod's Dream: Caesarea on the Sea* (New York: W. W. Norton, 1988), 107-153.

the Byzantine period is an indication of their concern over threat of foreign attack and violence from civil conflict. Following Constantine's conversion to Christianity in 312, Caesarea's inhabitants replaced Herod's pagan temple with an octagonal Christian church dedicated to the martyr, St. Procopius.¹⁹ In contrast to the bloody days of Christian torture and massacre in Caesarea's amphitheater, by the sixth century, the Roman emperors targeted non-Christians for persecution. In 555, the Palestinian Samaritan population revolted against Justinian's forced conversion policy. Violence erupted when the Jews attacked and burned Caesarea's Christian churches. The emperor retaliated with military oppression, mass execution, and enslavement.²⁰

Islamic expansion in Palestine during the seventh century presented the first test of Caesarea's defenses against military onslaught. In 614, a Persian army invaded the Sharon Plain and captured the city with little difficulty. Although the Byzantine emperor, Heraclius, attempted to retake and hold the city in 627, Caesarea eventually fell to the Muslims in 640. Since it was the last strongpoint in Palestine to surrender to the Arab invasion, Muslim chroniclers heralded the conquest of Caesarea as the pinnacle of their military campaigns. They greatly exaggerated their victory, reporting the siege lasted seven years with seventeen thousand Muslim warriors against a city population of 930,000. In reality, the campaign probably lasted seven months and the defenders were no more than seven thousand.²¹ Islamic Caesarea persisted for over four hundred years despite repeated attempts of Byzantine emperors to recapture the coastal fortifications. Since the Arab rulers viewed Caesarea strictly as an outpost to defend against these

¹⁹ Procopius—a Christian cleric of Scythopolis (Beth Shean), arrested and martyred in the amphitheater at Caesarea in the Great Persecution of 303-313. Holum, *Herod's Dream*, 161.

²⁰ Holum, *Herod's Dream*, 155-200.

²¹ Van Donzel, "Kaysariyya."

advances, the infrastructure and economy of the city declined considerably. Although the emirs did transform the Byzantine church on the temple platform into a mosque, they allowed the harbor to fill in with sand and become unusable. In addition, the Muslim fortification wall enclosed the smallest area necessary to garrison the site, a rectangular area of 12.2 hectares (twenty-two acres). Nevertheless, despite the reduced perimeter, Muslim chroniclers noted the effort the engineers applied to the stalwart defenses.

Crusader military interest in Caesarea, which officially began with Baldwin's siege and Muslim displacement in 1101, spanned nearly two hundred years of Frankish occupation in Palestine. The first eighty years were the most prosperous, uninterrupted by threat of siege or pitched battle outside the city walls. However, in 1187, Saladin's forces gained the upper hand following the battle of Hattin. In that year, Muslim forces captured Caesarea and destroyed its defenses. They further returned in 1191 to insure its complete destruction, sending the city into a twenty-seven year period of ruin and decline. Under the leadership of Leopold VI, the Crusaders returned to fortify Caesarea in 1218, but their efforts failed when the Muslims again invaded the coast and razed the new defensive structures. Nearly a decade passed before Frederick II's forces succeeded in restoring Caesarea's walls in 1228. This date marked the beginning of a second major period of prosperity lasting thirty-seven years. In 1251, Louis IX (St. Louis) brought his troops to Caesarea to improve the city's defenses, an effort that surpassed any of the fortification achievements of Caesarea's fifteen hundred-year history. Despite Louis' modifications, the Crusader city finally fell to Sultan Baybars in 1265. The Muslims

further reduced the fortifications to ruin in 1291, permanently sealing the fate of Crusader occupation on the site.²²

The long history of Crusader fortification and refortification at Caesarea represented a determined military strategy for acquiring and holding specific strongpoints in the Latin Kingdom. Not unlike several other cities on the Mediterranean seaboard, Caesarea's coastal location, favorable natural resources, and historical legacy as a site of strategic defense made certain aspects of this interest obvious. However, throughout the span of Crusader occupation, the Franks' unflagging resolve to rebuild and defend such sites, despite the enemy's repeated destruction, suggests a fuller explanation. Beyond the benefits of Caesarea's material features, Frankish effort to secure and hold the city pointed to the Crusaders' unalterable dependence on fortification. Muslim interest in Caesarea never required the Crusaders to return to the site to conquer an opposing foe. The sultans had no desire to occupy or refortify Caesarea. Rather, they laid siege to the city for one purpose, to expel the Franks and destroy their defenses hoping to discourage them from ever returning to the site. This contrast in military behavior implies the Crusaders required the walled city in a way their Muslim opponents never did.

As the occupying power in a foreign land, the Crusaders had the great disadvantage of trying to control a native population that vastly outnumbered them. This overriding factor partially led the Crusaders to impose the feudal system of organization in the Latin Kingdom. Lacking sufficient numbers to settle the land, they relied on the fortifications scattered throughout the countryside to serve as administrative centers of

²² Hazard, "Caesarea," 80-89.

control. The lords and knights, limited in strength, reigned over the fief from the defensive protection of the fortress. On the battlefield, the Muslim armies always had the upper hand due to their overwhelming numbers. Whereas Frankish battle tactics centered on structured shock combat engagements and the mounted charge, the non-professional Muslim armies shared no such tradition. Rather, they excelled in fielding massive forces, incorporating mounted archers to engage the heavily armored Franks from a distance. In this way they refused the Crusaders opportunity for close combat. The Frankish knights thus depended on their fortifications to serve as force multipliers, to make up for their lack of manpower on the battlefield and enable them to hold territory. However, the fortresses were more than defensive hideouts or passive survival shelters. On the contrary, the evidence of Frankish warfare and architectural engineering throughout two centuries of occupation suggests the fortifications became the central instrument by which the Crusaders hoped to secure and defend the Latin Kingdom. Beyond mere bastions of survival, the fortresses evolved and adapted to counter specific Muslim military threats. Siege warfare was the critical arena of military conflict in the Levant, and the fortress its primary weapon.

The history of Crusader fortification at Caesarea provides a unique case study for analyzing the military strategy shaping Latin occupation in the Levant. Both the architectural features of Caesarea's defenses and the history of Frankish settlement on the site vividly illustrate the dynamics that compelled the Crusaders to invest so heavily in their walls of stone. Lack of manpower underscored a critical need to defend themselves in a land they attempted to govern but could never hope to settle. However, the defenders never expected their walls to replace the need for battle, nor did they hide

behind their defenses in an effort to avoid warfare. On the contrary, they employed their fortresses as their primary means of engaging the enemy. They studied the threats posed by Muslim siege craft and developed architectural countermeasures to neutralize them. In this way, the legacy of Caesarea serves to demonstrate how Crusader fortifications became the central military strategy supporting Latin settlement in the Kingdom of Jerusalem.

THE STUDY OF CRUSADER FORTIFICATIONS

Over the last century, military historians examined the history of Latin occupation in Palestine from several vantage points. Although most included a description of castles in the Levant, few researchers thoroughly assessed the function of fortresses in the context of military strategy in the Latin East. The earliest scholars conducted site survey work on the fortifications with an interest in describing features and transitions in military architecture. Later historians attempted a broader analysis, but some misapplied their knowledge of medieval warfare in Europe to their description of military activities overseas. In the process, they devalued the fortifications in favor of the mounted knights on the battlefield. Recent decades fostered a new perspective on the role of strongpoints in the Latin Kingdom. Starting from a variety of new source materials, these historians were able to reconstruct the outline of Crusader institutions supporting Latin settlement in the Levant. Consequently, they discovered that the fortifications served both military and non-military functions contributing to the prolonged survival of the Kingdom of Jerusalem.

In 1857, a twenty year old Frenchman, Emmanuel G. Rey, left his aristocratic estate in Chartres to pursue intellectual interests in Syria and Palestine. It was the first of three such journeys the young man would make across the Mediterranean over a seven-year period. One of the newest members of the Société Archéologique, he was

determined to visit all the major Crusader fortification sites in the Levant. Like many promising scholars of his day, Rey sailed off in his quest inspired by a renewed intellectual fascination with the Crusades, particularly with the legacy of Frankish military occupation in the Middle East.

The publication of Michaud's *Histoire des Croisades* in 1822, followed by his *Bibliothèque des Croisades* in 1829, sparked a renewed interest in the history of the Crusades across France. Patriotic motivations tied to current affairs further inspired investigation. The outbreak of the Crimean War in 1854, a conflict involving the protection of Christian churches in the Holy Land, fanned the embers of Frankish medieval passions nearly cooled after six hundred years.¹ In 1860, a Muslim massacre of Christians in Damascus erupted in calls for French occupation of Syria. "In this climate, a scholar who showed how lords from Champagne, Burgundy and the Ile de France had once ruled in Syria, and had, furthermore, left magnificent castles to prove it, was sure of a ready hearing."²

In 1871, fourteen years after his initial journey to the Levant, E. G. Rey produced his pioneering work on Crusader fortifications, *Etudes sur les monuments de l'architecture militaire des Croisés en Syrie et dans l'île de Chypre*. Rey's manuscript, an architectural gazetteer, represented the first scientific treatment of Crusader defenses, providing detailed descriptions and drawings for all the important sites, including the

¹ The Crimean War (1854-1856) was initiated by opposing claims to Jerusalem among Roman Catholic and Greek Orthodox monks in 1851. France and Britain supported Catholic interests, whereas Russia backed the Orthodox faith. Russia moved to overthrow the Ottoman sultan and gain control of the East, inciting France and Britain to intervene on behalf of Western religious and economic interests. "France, citing traditions ranging from the Crusades to Richelieu, supported the Latin monks and pressed the Ottoman sultan, whose empire included Jerusalem, to grant them specific privileges." Mortimer Chambers et al., *The Western Experience, Vol. III: The Modern Era* (New York: Alfred A. Knopf, 1983), 831.

² Hugh Kennedy, *Crusader Castles* (Cambridge: Cambridge University Press, 1994), 1-2.

finest of Crusader castles such as Crac des Chevaliers in Syria. Although he remained a private scholar throughout his life, never holding a formal academic position, Rey's contribution laid the foundation for a century of Crusader fortification study.³

One of the most famous students of Crusader monuments to trace Rey's path across Syria was T. E. Lawrence, better known in later years as Lawrence of Arabia. In 1909, Lawrence, then an undergraduate at Cambridge, traveled on foot across the Middle East taking photographs and making observations in support of his dissertation on Crusader castles. His project addressed the influence of the Crusaders' military experience in the East on the castle architecture in the West. His thesis, eventually published a year after his death in 1936, attempted to show the Crusaders learned very little from their exposure to Eastern styles of fortification. He asserted that European military architecture was superior to Byzantine and Muslim examples. Based on evidence collected on lengthy bicycle trips to castle ruins throughout France, he argued that the best of medieval architecture developed independently in the West.⁴

In 1921, the establishment of the French Mandate in Syria, along with its associated Department of Antiquities, opened the door for further exploration of Crusader fortifications. Inspired by the tradition of Frankish occupation in the Levant, General Gouraud, the first Haute-Commissaire in Syria and Lebanon, commissioned Paul Deschamps to catalog the Crusader monuments in 1927. Deschamps, a promising scholar of French art and architecture, traveled to the Middle East and used Rey's plans of Crac des Chevaliers to launch the first intensive investigation at that site. He also

³ Kennedy, *Crusader Castles*, 3.

⁴ Pringle, introduction to *Crusader Castles*, xxi-xxxix.

studied fortifications at Beaufort in Lebanon, Château Pèlerin in Palestine, and the remote desert stronghold of Kerak in Jordan. In 1934, Deschamps established himself as the leading expert on Crusader fortifications with his three-volume work, *Les Châteaux des croisés en Terre-Sainte*.

Deschamps' contribution to fortification research concentrated on the study of military architecture and analysis of geographic context. In the second volume of *Les Châteaux des croisés en Terre-Sainte*, Deschamps described a number of selected fortresses and analyzed how their locations served to form a system of defense around the Latin Kingdom. In his view, the Crusaders strategically deployed their stone citadels to control regional boundaries; geography ultimately determined their location.

Fortifications served as man-made remedies for nature's deficiencies wherever gaps breached the barriers of desert or mountain range. In the East, for instance, the Franks integrated the placement of their fortresses with the natural frontier boundary of the Rift Valley to create a defensive perimeter. In his words, the strongpoints of the Transjordan formed a line on the summits "like advance sentinels to defend access to Judea."⁵

Scholarship over half a century from Rey through Deschamps produced the structural detail and geographical information necessary for further study of Crusader defenses. However, a majority of military historians were unimpressed with the fortifications in their analysis of the art of war during the Crusades. Preceding Deschamps by a decade, Sir Charles Oman, in his classic two-volume study, *A History of the Art of War in the Middle Ages* (1924), failed to provide any analysis in regard to

⁵ Paul Deschamps, *Les Châteaux des Croisés en Terre-Sainte*, vol. 2: *La Défense du Royaume de Jerusalem* (Paris: Librairie Orientaliste Paul Geuthner, 1939), 1.

the Crusader strongpoints. Instead, Oman viewed Crusader military strategy in a limited context, as a tactical enterprise conducted by two armies on the battlefield. The “supremacy of the mailed horseman” and his victory or defeat in selected battles served as Oman’s primary focus of generalization. Although he provided a disclaimer for his inattention to “castle building,” the fact he viewed the subject of fortification as merely supplementary to his discussion on the art of war revealed much about his analytic framework.⁶

Another noted military historian, J. F. Verbruggen, addressed the subject of military strategy in much the same fashion as Oman. Originally published in Brussels in 1954, Verbruggen’s, *The Art of Warfare in Western Europe During the Middle Ages*, argued that “armoured cavalry dominated the military life and the warfare of Western Europe....” Reflecting Oman’s emphasis on the battlefield, Verbruggen imposed his understanding of military operations in Western Europe on Crusader warfare in the Latin East. His historical analysis isolated the mounted knights, foot soldiers, and archers from their wider context, emphasizing their composition, order, and battlefield tactics. Although he poetically described the castle as one of the “abiding symbols of medieval warfare,” his brief section on defensive strategy neglected the significance of Crusader fortifications in countering Muslim siege operations. Instead, he equated the function of the fortress in the Latin East with that in the West, seeing it as a passive refuge, a hideout that created a stalemate between the defenders and their foes.⁷

⁶ Charles Oman, *A History of the Art of War in the Middle Ages*, vol. 1 (London: Greenhill Books, 1991), vi, 231-352.

⁷ J. F. Verbruggen, *The Art of Warfare in Western Europe During the Middle Ages: From the Eighth Century to 1340*, trans. Sumner Willard and S. C. M. Southern (Amsterdam: North-Holland Publishing Company, 1977), 285-302.

Despite the tendency of some early writers to isolate and emphasize the significance of battlefield engagements, other medieval historians paved the way toward a broader understanding of military activity within the Latin Kingdom of Jerusalem. Following the Second World War, which largely disrupted archaeological investigation in the Middle East, scholars in the newly created state of Israel initiated a groundbreaking examination of Crusader settlement in Palestine. In the 1950's, Joshua Prawer of Hebrew University was among the early contributors to this new paradigm.⁸ Parting from traditional emphasis on the military campaigns, Prawer incorporated a social historical analysis, viewing the two hundred-year history of the Latin Kingdom as a "Western colonial movement on the eastern shores of the Mediterranean."⁹ His examination of a variety of new primary source materials, including charters and legal documents, enabled him to reconstruct a feudal system which the Crusaders imported and imposed in their attempt to colonize the Middle East. While describing the social and political fabric of the Latin Kingdom, Prawer recast the discussion of knights and fortifications within a wider context, highlighting the domestic and international security issues shaping the importance of these Crusader military institutions. For Prawer, fortifications were significant both for their military and non-military functions. Beyond mere defensive architecture, they served as symbols of domination and centers of political control and administration.¹⁰ Medieval historians still regard his original work,

⁸ J. Richard worked with Prawer and published the first narrative history on the constitution of the Latin Kingdom. Christopher Marshall, *Warfare in the Latin East, 1192-1291* (Cambridge: Cambridge University Press, 1992), 9.

⁹ Joshua Prawer, *Crusader Institutions* (Oxford: Clarendon Press, 1980), xi.

¹⁰ Joshua Prawer, *The Crusaders' Kingdom: European Colonialism in the Middle Ages* (New York: Praeger Publishers, 1972), 280.

Histoire du Royaume Latin de Jérusalem (1969), as one of the best accounts of Crusader occupation in the Holy Land ever produced.¹¹

Drawing upon Prawer's reconstruction of feudal society in the Levant, as well as the fortification studies of earlier military historians, R. C. Smail published his landmark study, *Crusading Warfare: 1097-1193*, in 1954. Although he acknowledged Prawer as "foremost among those scholars whose researches are now deepening our knowledge of the Latin settlement in Syria," Smail carried Prawer's analysis beyond social institutional structures toward a focused examination of military tactics and strategy in the Latin Kingdom.¹² However, in contrast to Oman and Verbruggen, who limited their discussion of the art of war to the mailed horseman, Smail examined Crusading warfare in the broader context. He critiqued the early school of military historians, stating that "most of these scholars have confined their interest in war to events on the battlefield, and have looked no further. . . . warfare was an integral part of the whole life of Latin Syria, . . ."¹³

Smail's thesis was groundbreaking because it successfully challenged the limited views of previous scholars, incorporating the recent findings of medieval social historians. Whereas Deschamps argued that fortresses formed lines of defense to prevent enemy incursion, Smail expanded the significance of strongpoints to discuss their function as centers of domestic security. Rather than forming defensive boundaries, Smail contended the distribution of fortresses across the kingdom formed a series of points allowing them to control regions rather than frontiers.¹⁴ In this way,

¹¹ Marshall, *Warfare in the Latin East*, 10.

¹² R. C. Smail, *Crusading Warfare, 1097-1193* (Cambridge: Cambridge University Press, 1995), xii.

¹³ Smail, *Crusading Warfare*, xi.

¹⁴ Smail, *Crusading Warfare*, 62, 204-207.

fortifications supported the foundation of Latin settlement strategy in the Levant. More than stone walls in the background of the battlefield, Crusader garrisons were the vital instruments of domination. Warfare in the Latin Kingdom hinged on the fight to secure strongpoints, and this objective ultimately shaped the activities of the knight on horseback. As Smail stated, "Effective and durable lordship over a district depended on possession of the walled towns and castles which lay within it. An invader could control an area while he occupied it with an army; but if he took no strong place then his control ended with the withdrawal of his forces."¹⁵

Smail's thesis revitalized the importance of fortification study and opened the door for the next fifty years of scholarship devoted to understanding the role of defensive structures in the Latin East. Combining the detailed approach of Deschamps' explorations and the insight of Prawer's analysis, Denys Pringle, working with the British School of Archaeology in Jerusalem, launched an innovative study of Frankish settlement in the Sharon Plain. Beginning in 1983, Pringle centered his research on a fortification known as the Red Tower (Al Burj al-Ahmar), a minor castle built on the agricultural lands in the southern portion of the fief of Caesarea. His objective was to analyze the pattern of Crusader occupation in the countryside, emphasizing the role of fortifications at the local level. In 1986, Pringle published these findings in his acclaimed monograph, *The Red Tower*. Although his study emphasized the feudal function of rural fortresses, Pringle also addressed their strategic value as strongpoints defending networks of transportation and communication, serving as bases for mobile

¹⁵ Smail, *Crusading Warfare*, 24.

garrisons, and providing refuge in times of crisis.¹⁶ Pringle's study was influential because it demonstrated a new potential of archaeological survey work. Going beyond the architectural studies of previous fortification scholars, Pringle showed that site survey could analyze both the form and function of strongpoints, leading toward a fuller understanding of medieval society.

Military historians within the last decade have displayed an increasing interest in Crusader fortifications. In his 1992 treatise, *Warfare in the Latin East, 1192-1291*, Christopher Marshall centered his discussion of Crusader military strategy around the fortress, arguing that "the aim of most warfare in this period was the capture or defense of territory, through the acquisition and retention of strongpoints."¹⁷ Designed as a sequel to Smail's earlier work covering the period 1097-1193, Marshall devoted a third of his book to fortifications and siege warfare. In the same year, Randall Rogers published his, *Latin Siege Warfare in the Twelfth Century*. Paralleling Marshall's treatment of the last century of Crusader occupation, Rogers' work served as a revision of Smail, emphasizing the critical importance of strongpoints throughout the history of the Latin Kingdom. Although Rogers credited Smail for establishing "the relationship between field armies and fortifications in defending the Latin states," he found Smail's depiction of the military function of fortresses incomplete: "Smail provides little concerning relationships between offensive forces and fortifications."¹⁸ Rogers asserted that siege warfare, the battle between army and garrison, was the primary arena of military activity in the Levant. Consequently, fortifications stood at the heart of the

¹⁶ Pringle, *The Red Tower*, 14.

¹⁷ Marshall, *Warfare in the Latin East*, 17.

¹⁸ R. Rogers, *Latin Siege Warfare in the Twelfth Century* (Oxford: Clarendon Press, 1992), 3.

conflict. More than centers of regional control and defense, Rogers characterized strongpoints, their capture and defense, as the focus of military strategy during the period.

Complementing the views of Marshall and Rogers, a third author advanced the military function of fortifications to a higher level in 1994. In his book, *Crusader Castles*, Hugh Kennedy critiqued Marshall for neglecting to discuss the technological development of military tactics and weaponry during the period of Latin occupation. Citing recent scholarship in fortification studies, Kennedy suggested that radical engineering improvements in medieval artillery at the end of twelfth century "led to marked changes in castle building."¹⁹ He argued that Crusader military architecture responded readily to the threats posed by advancements in Muslim siege craft. At several points, the Crusaders modified their fortifications to meet these challenges. For instance, they constructed larger towers with broader platforms. These provided the room required for mounting heavy weaponry capable of launching projectiles at the besieging army. This important countermeasure enabled the defenders to keep the enemy's pulverizing catapults at a safe distance. Kennedy argued that these architectural modifications illustrated the Crusaders' active use of their garrisons as instruments of war: "It was no use sitting behind castle walls and trusting in their strength: unless the defenders took active measures to neutralize the artillery, the fortress they had built would be destroyed as surely as the incoming tide washes away the children's

¹⁹ Kennedy referred to the unpublished work of P. Cheveddin. Kennedy, *Crusader Castles*, 9.

sandcastle.”²⁰ Far more than passive defense structures, Kennedy viewed the Crusader fortification as the primary weapon of medieval warfare in the Latin Kingdom.

The history of Crusader occupation and defensive construction at Caesarea best corresponds with the research of later military historians who described the fortification as the foundation of Latin settlement in Palestine. As one of the major walled cities and population centers on the Mediterranean seaboard, the fortress supported the institutional structures vital to the security interests of the Kingdom of Jerusalem. In addition, the city's military engineers armed the garrison with innovative architectural features designed to combat the rigors of Muslim siege craft. More than a passive refuge, the Crusaders relied on the fortification at Caesarea to assert their claim to domination and perpetuity in the Levant.

²⁰ Kennedy, *Crusader Castles*, 108.

THE FORTIFICATION AT CAESAREA

Review of Archaeological Exploration

Archaeologists have conducted large-scale excavations at Caesarea since the 1950's. Before that, European travelers, inspired by renewed interest in the Holy Land, contributed to the exploration of Caesarea through site survey work. Richard Pococke, a student of Middle East history, produced the first modern map of Caesarea in 1745 (Fig. 3). He was the first to make detailed observations on the aqueducts and the existence of an outer perimeter wall. Pococke also clearly defined the ruined Crusader fortification walls which he correctly dated to Louis IX in 1251. Over a century later, two British surveyors working with the Palestine Exploration Fund, Lieutenants C. R. Conder and H. H. Kitchener, published a map of the site in 1882 (Fig. 4). They identified Pococke's outer perimeter wall as the fortification limit during the city's Roman period. They also identified two phases of Crusader fortification, one dating to the early thirteenth century, the other to the later fortification efforts of Louis IX.¹

¹ Other early site surveys included a map by Colonel Pierre Jacotin in 1799 following Napoleon's aborted military campaign in Egypt. In addition, in 1863, A. L. Mansell, working with the French navy, produced a navigational map of the Palestinian coast which included a detailed description of Caesarea. Avner Raban and Kenneth G. Holum, *Caesarea Maritima: A Retrospective After Two Millennia* (Leiden: E. J. Brill, 1996), xxxii; Robert L. Vann, "Early Travelers and the First Archaeologists," in *Caesarea Papers: Straton's Tower, Herod's Harbour, and Roman and Byzantine Caesarea*, *Journal of Roman Archaeology Supplementary Series 5* (Ann Arbor: University of Michigan, 1992), 278-286.

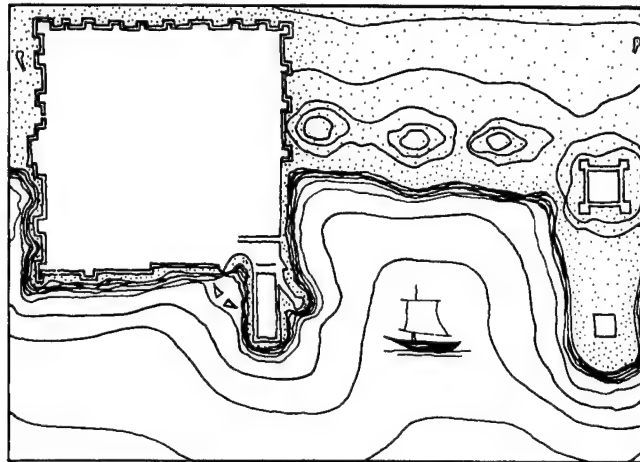


Figure 3. Richard Pococke's Map of Caesarea, 1745.
Vann, *Caesarea Papers*.

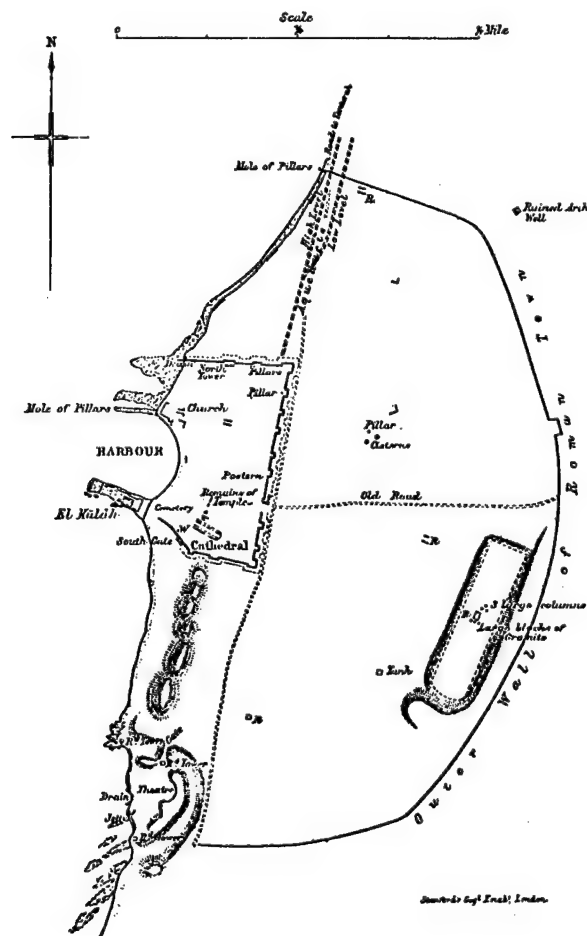


Figure 4. Conder and Kitchener's Map of Caesarea, 1882.
Vann, *Caesarea Papers*.

Caesarea remained untouched for the next eighty years while more notable Biblical sites attracted the attention of archaeologists. Then, toward the end of the British Mandate in Palestine, agricultural workers from the newly established Kibbutz Sdot Yam ("fields of the sea") discovered marble screen fragments and mosaic inscriptions from an ancient synagogue. In response to the finds, the Mandate's Department of Antiquities initiated a limited excavation work in 1945. Sustained archaeological exploration began in 1951 when a Sdot Yam tractor accidentally struck a colossal porphyry statue buried in the fields east of the Crusader city. Shmuel Yeivin, then Director of the Israel Department of Antiquities, excavated a marble-paved area he identified as the Byzantine esplanade.²

In 1959, a group of Italian researchers, the Missione Archeologica, launched the first systematic, large-scale exploration effort at Caesarea. Directed by Antonio Frova, the Missione spent six years investigating the Roman history of the city. Frova studied the aqueducts and confirmed the date of the outer perimeter wall to the Byzantine period. In addition, he discovered the northern segment of an inner perimeter wall which he dated to the Herodian period. The Missione also excavated the Herodian amphitheater and Roman fortress.³

During the same period (1960-64), Avraham Negev from Hebrew University at Jerusalem conducted an intensive study of the Crusader fortification walls. Working on behalf of the Israeli National Parks Authority, Negev excavated and cleared the moats surrounding the medieval city. He also studied and restored Caesarea's unique

² Vann, "Early Travelers," 288; Ephraim Stern, ed., "Caesarea" in *The New Encyclopedia of Archaeological Excavations in the Holy Land*, 1993, 271-72.

³ Stern, "Caesarea," 272.

fortification structures, including the well-preserved east gatehouse. He exposed the west face of the Herodian platform and the remains of a triple-apsed Crusader church which he identified as the Cathedral of St. Peter. On the southern breakwater of the Herodian harbor, Negev studied the Crusader citadel and investigated its foundation structures. North of the Crusader city, Negev explored a large section of the high-level aqueduct and uncovered possible evidence of Strato's Tower near the Herodian perimeter wall. To the south, he exposed a structure he identified as the library of Origen and Eusebius.⁴

Frova and Negev paved the way for extensive exploration efforts over the next three decades within the Crusader fortification and harbor basin. Edwin Link, one of the pioneers of underwater archaeology, initiated a survey of Caesarea's harbor in 1960. Avner Raban from Hebrew University at Haifa continued exploration of the harbor in 1976. He then joined forces with an international team of marine archaeologists in 1980, forming the Caesarea Ancient Harbor Excavation Project (CAHEP). This team deciphered the ancient harbor's layout and the techniques used to construct the massive breakwater surrounding it. In addition, Raban located the submerged foundations of a medieval wall and tower along the eroded western boundary of the city, enabling him to identify the entrance to the Crusader inner harbor.⁵

In conjunction with the harbor explorations, the Joint Expedition to Caesarea Maritima (JECM), a consortium of twenty-two academic institutions from the United States and Canada, launched a twelve-season excavation effort in 1971. These

⁴ Stern, "Caesarea," 272; Raban, *Caesarea Maritima*, xxxiv-xxxv.

⁵ Stern, "Caesarea," 290.

archaeologists introduced new and sophisticated research techniques including stratigraphic balk excavation and ceramic analysis. Under the direction of Robert Bull and associates, JECM studied the grid plan of Herod's city. During this time, Ehud Netzer and Lee Levine, both from Hebrew University, explored the site of Herod's promontory palace south of the harbor. In addition, Yoseph Porath studied the south gate of the Crusader fortress and part of the fortification wall in 1989, identifying at least two phases of medieval construction prior to initial Crusader occupation in 1101.⁶

In 1988, Avner Raban joined Kenneth Holum from the University of Maryland to form the Combined Caesarea Expeditions (CCE), the organization which, to this day, sustains an intensive commitment to marine and land exploration at Caesarea. Over the last decade, CCE has explored sectors inside and south of the medieval fortification walls. In recent seasons, Raban and Holum have concentrated on the Herodian platform, the monumental city center of both the ancient and medieval periods. Excavation on the platform has exposed the massive foundations of Herod's temple and the remains of a later octagonal church, constructed by the Byzantines directly on top the temple stones. In addition, CCE has identified numerous medieval structures, including wells, cisterns, streets, and building structures from the Crusader period.

The archaeological top plan in figure 5 depicts the most recent survey of medieval fortification structures excavated at Caesarea. Figure 6 shows a reconstructed view of those features. Virtually all the visible ruins at Caesarea date to the fortification efforts of Louis IX in 1251. However, most of the structures have foundations predating

⁶ Stern, "Caesarea," 272; Raban, *Caesarea Maritima*, xxxv.

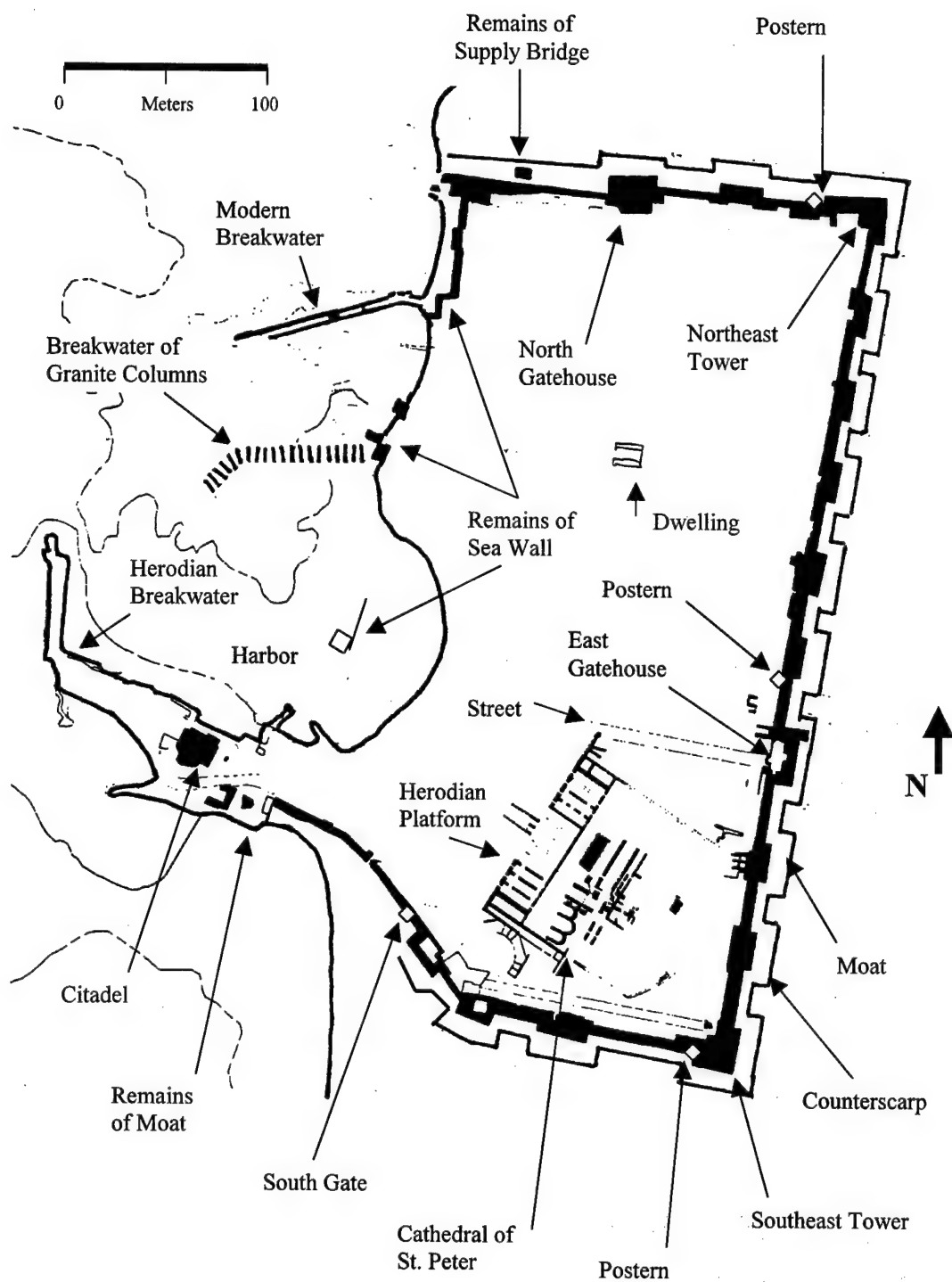


Figure 5. Crusader Caesarea Top Plan. Based on CCE archaeological survey, 1998.

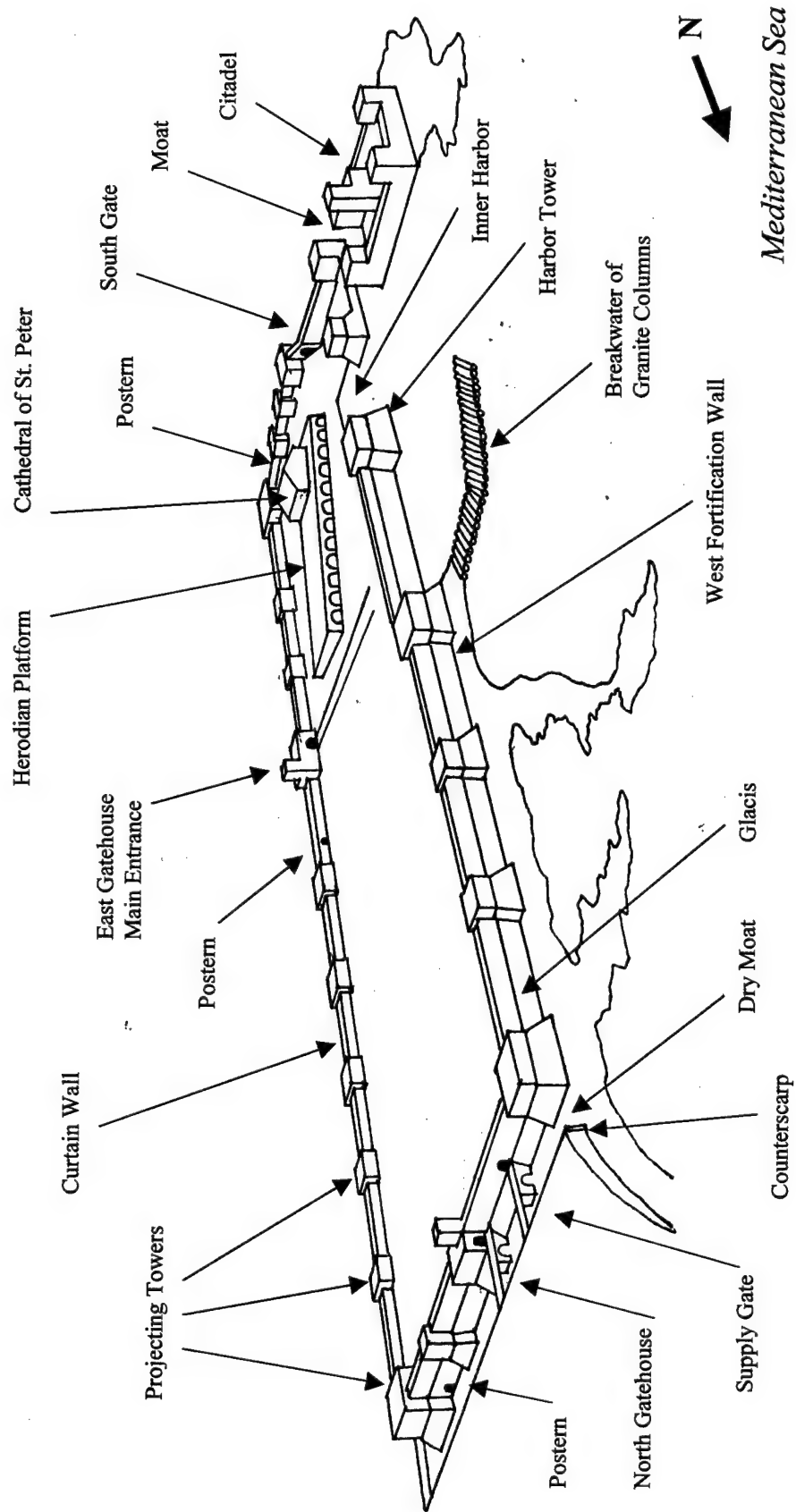


Figure 6. Crusader Caesarea Reconstruction. (View southeast).
Based on drawing in Holm, *King Herod's Dream: Caesarea on the Sea*.

Crusader occupation. The perimeter of the fortification coincides with the outline of the Islamic city walls, enclosing an area of 12.2 hectares. Preserved in situ, the ruins present a rare glimpse into Caesarea's military past. Although only one of several walled-towns and citadels in the Latin Kingdom, Caesarea's ruined battlements, towers, and defensive gateways all testify to the ingenuity and strategy the Crusaders employed in their attempt to secure the city and defend the Latin Kingdom of Jerusalem at large. Every architectural feature had a tactical purpose grounded in military forethought. The investigation of these structures reveals a strategic pattern of defense which the Crusaders deemed essential to sustaining their existence in the Levant.⁷

Curtain Walls

The fortification walls, the most fundamental feature of Caesarea's defense system, originally surrounded the city on all four sides. The east wall was 490 meters in length, the north 250, and the south 320. Today, the ruins of the massive curtain walls stand between one and two meters. An exception is a small section east of the south gate (Fig. 7). This segment stands approximately to its original ten-meter height (eighteen meters above the moat). In contrast, very little remains of the western wall along the seashore where changes in sea level and natural deterioration have eroded the original structures (Figs. 8, 9).⁸ However, marine archaeologists have identified the foundations

⁷ Kennedy, *Crusader Castles*, 119.

⁸ Raban has determined a one-meter increase in local sea level from the thirteenth century. Stern, "Caesarea," 290.

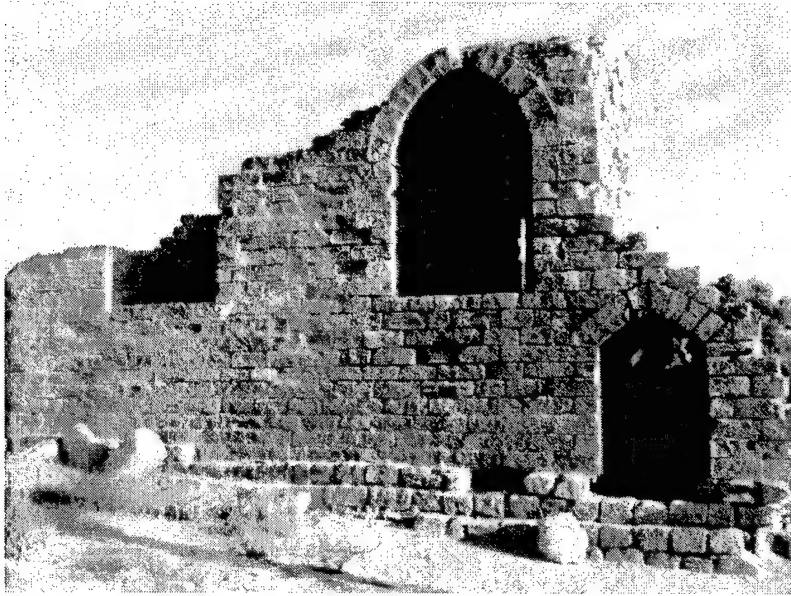


Figure 7. Partially Preserved Section of South Wall. (View south, interior face). Sultan Baybars destroyed Caesarea's walls in 1265 CE, leaving few sections standing above 1.5 meters. This section in the south wall is preserved to a height of nine out of an original ten meters. The arched openings are defensive positions, loopholes, providing access to arrow slits.

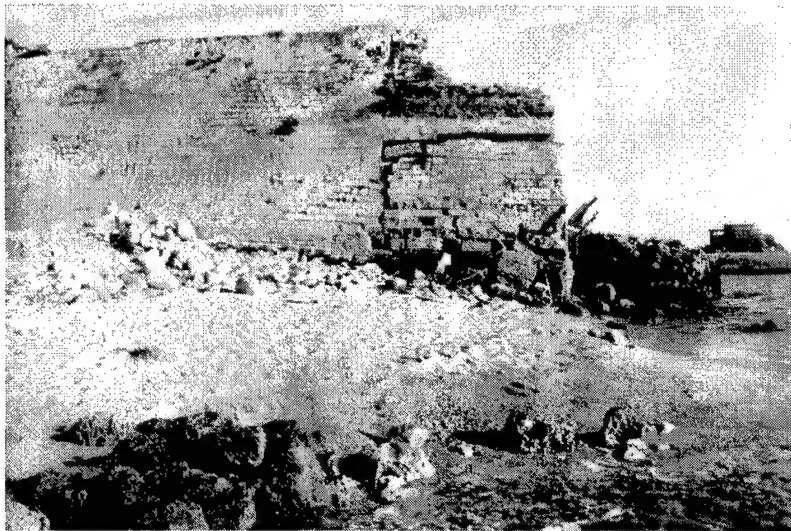


Figure 8. Remains of Northwest Corner Wall and Tower. (View south, exterior). Most of the tower has given way to the sea, breaking off in large sections. In the distance, remains of the citadel (harbor fortress) stand on the Herodian southern breakwater.

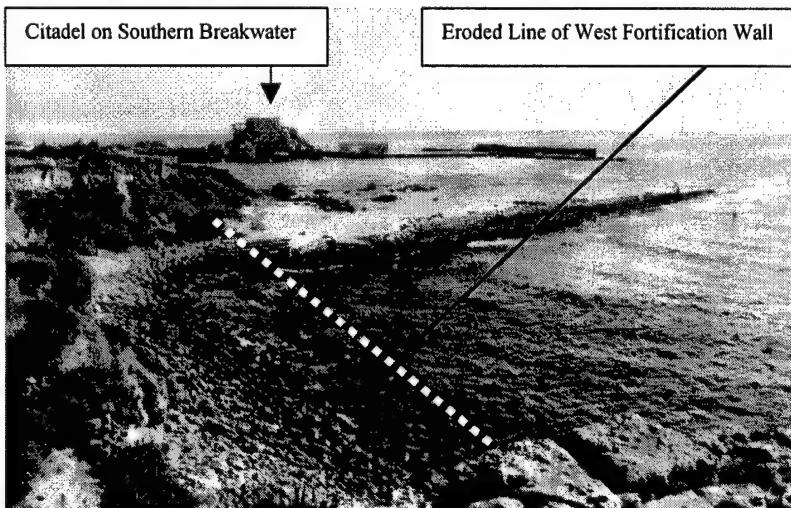


Figure 9. West Line of the Crusader Fortress. (View south from top of northwest corner tower). Very little remains of the west fortification wall due to sea erosion. The breakwater in the foreground is post medieval. Just beyond is the Crusader breakwater of granite columns and remains of the Citadel.

of a rectangular tower and wall in the middle of the modern harbor.⁹ The tower corresponds in size and shape to the rest of the Crusader fortification, and the wall running north has a base from four to six meters wide. These structures are in line with the remains of the northwest corner of the fortification. Their placement suggests a wall along the coast similar to the depiction in figure 6, approximately 250 meters in length from the northwest corner of the city to the submerged remains of the tower.

Figure 10 shows a cross section of the curtain wall. The builders used the local sandstone (kurkar) to provide a smooth ashlar (cut stone) facing for the exterior and interior surfaces. The ashlar blocks were rectangular, measuring twenty-five centimeters wide and fifty centimeters long. They were generally twenty centimeters thick. The laborers cemented the stones together using a lime-based mortar derived from burning stone marble in special kilns. Although not naturally available in Palestine, the Crusaders found an abundant supply of marble in the ruined fragments from Caesarea's Roman period.¹⁰ To provide sufficient thickness and strength, the engineers filled the middle of their walls with rubble and mortar, a construction method characteristic of medieval architecture (Fig. 10). The curtain walls varied in thickness from 3.34 meters in the south wall to 2.85 meters in the east.

The Crusaders never thought of their fortification as a passive defensive system. Rather, they designed the walls to combat the tactics of Muslim siege craft. To provide

⁹ Stern, "Caesarea," 290.

¹⁰ CCE excavated such kilns as recently as 1998 on the Herodian Platform. Caesarea is abundant in marble columns, bases, and capitals from Roman and Byzantine occupation.

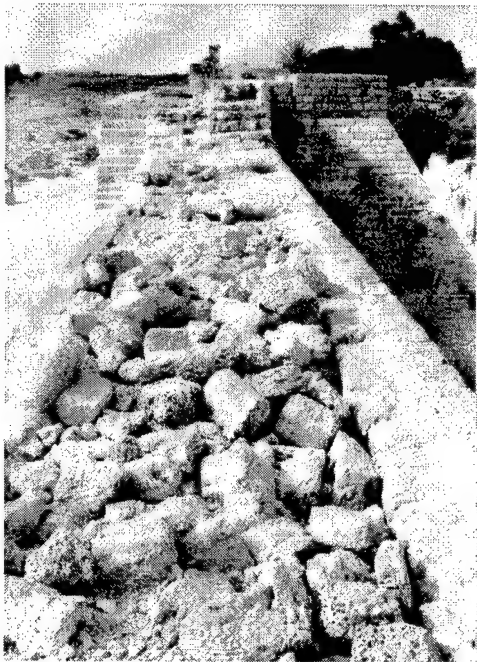


Figure 10. Curtain Wall Ashlar and Rubble Construction. (View north from southeast tower). Detail shows exterior and interior ashlar facing with rubble core.

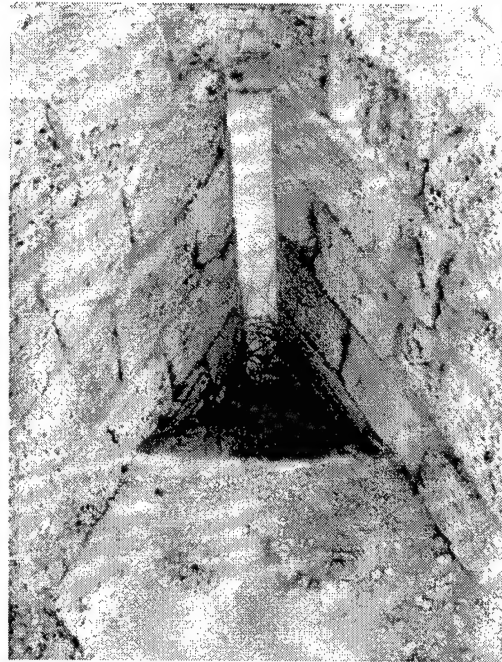


Figure 11. Arrow Slit Inside Archer's Loophole. (View east from interior of projecting tower). Sloping bottom surface allowed trajectory to base of the wall.



Figure 12. Section of South Wall. (View east from area near citadel). Foundation of this wall follows line of Byzantine breakwater.

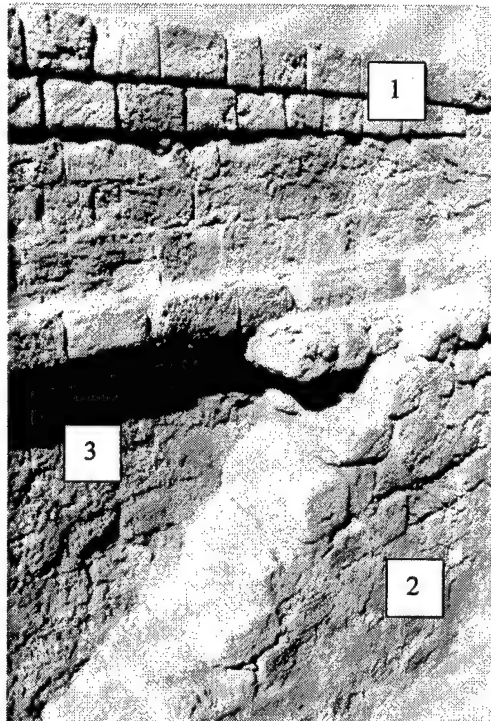


Figure 13. Face of South Wall Section. (View south, interior). Multiple construction phases: (1) Crusader repair, (2) Islamic city wall, (3) Byzantine breakwater.

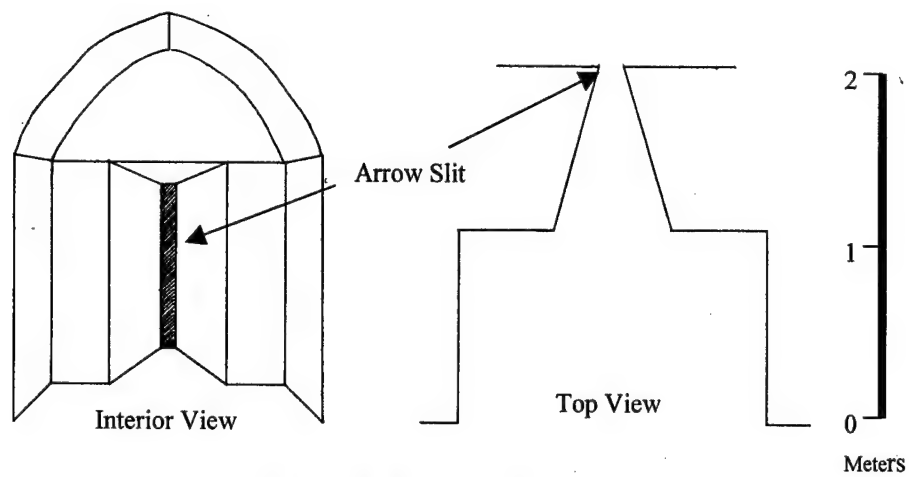


Figure 14. Archer's Loophole

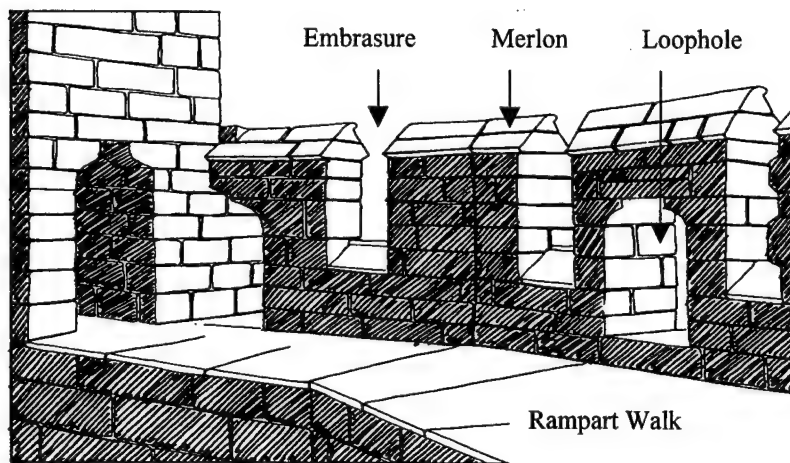


Figure 15. Medieval Crenellation. Based on drawing in Hogg, *The History of Forts & Castles*.

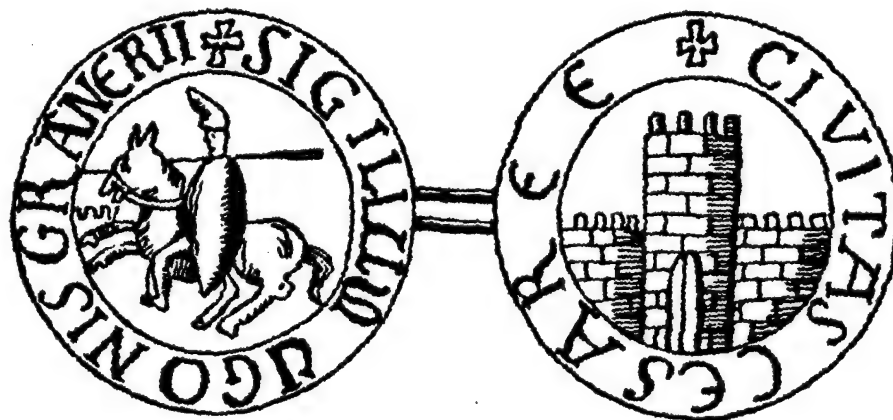


Figure 16. Seal of Gautier I, Lord of Caesarea 1123-1149. Borrowed from Negev, *Caesarea*.

defensive cover and ready access for the soldiers, interior passages linked strategically placed portals from which archers could defend the fortification and repel the enemy. The designers allocated these archers' stations, or loopholes, throughout the circuit of the curtain walls. The loophole was large enough for one man, approximately 1.5 meters high, 1.72 meters wide, and 1.06 meters deep (Figs. 11, 14). The front of the loophole had a triangular wedge eighty-seven centimeters deep. It opened at a width of sixty-five centimeters and narrowed to an arrow slit only eight centimeters wide, extending 1.5 meters from floor to ceiling. The section at the base of the arrow slit sometimes sloped downward to permit clear trajectory to the foundations of the walls in the moat below. Only one archer could aim and fire at a target through this narrow wedge.

In addition to the loopholes, the military engineers designed the wall-heads to serve the combat functions of the fortress. In all likelihood, they incorporated the customary crenellation techniques of the period (Fig. 15). The tops of the walls provided room for ramparts or walkways. The architects notched the rims with embrasures, openings designed to allow the soldiers clear view of the outer walls and moat below. Between the embrasures, merlons provided protective barriers to guard the defenders against enemy missiles. These design features enabled the besieged troops to hold positions from which they could drop unsavory deterrents like boiling oil and rocks on the heads of the enemy. There are no archaeological remains to support a study of Caesarea's wall head battlements. However, the diagram on a twelfth century leaden seal provides a glimpse into the design of the city's early defensive structures (Fig. 16). The seal belonged to Gautier I, Lord of Caesarea from 1123-1149. The front face depicts a mounted knight with the inscription, 'Sigillum Galterii Granerii' ('Seal of

Gautier of Granier'). The reverse shows a gate tower flanked by a curtain wall and the inscription, 'Cesarea Civitas' ('City of Caesarea').¹¹ The illustrated tower and wall clearly indicate the use of crenellation at Caesarea.

The curtain walls were built on Islamic foundations predating Crusader occupation by two centuries.¹² The Crusaders, both out of convenience and practical necessity, added their construction to the Muslim fortification structures. Muslim travelers in Palestine during the tenth century commented on the strength of these early walls, heralding them as "impregnable."¹³ In addition, some of the Islamic walls incorporated structures dating to the Byzantine period. The wall section in figure 12 illustrates one example of how the Crusaders assimilated earlier structures into their defensive plan. The top two courses of stone (Fig. 13) are all that remain of the Crusader phase of this wall section. The next four courses and the stairway leading up to them are the remains of the Islamic city wall. The layers of stone behind the stairway, below the ledge, formed part of a Byzantine breakwater construction.

In addition to the earlier structures, there were also separate phases of wall construction during the two hundred-year span of Crusader occupation. At least two building phases preceded Louis IX's fortification in 1251; one by Frederick II in 1228 and another by Leopold VI in 1218. Since the Crusaders conquered Caesarea in 1101, several modifications altered the shape of the city's defenses throughout the twelfth

¹¹ John L. La Monte, "The Lords of Caesarea in the Period of the Crusades," *Speculum* 22:2 (April 1947): 148. *Sigillum* from *Sigillum* referring to the figure on a signet ring—a wax seal; *Civitas* from *Ciutas* referring to a city and its surrounding area. P. G. W. Glare, ed., "Sigillum" and "Ciutas," in *The Oxford Latin Dictionary*, 1984.

¹² Yoseph Porath excavated the medieval wall below the south gate in 1989-90 and identified at least three earlier Islamic construction phases. Stern, "Caesarea," 286.

¹³ Hazard, "Caesarea and the Crusades," 79.

century as well. Consequently, assigning dates to the Crusader remains is contingent upon the specific feature in question. For example, the east and north gatehouses date to the middle of the thirteenth century. However, certain features of their foundations and wall sections are of prior origin, existing from the beginning of the Crusader period.

The glacis, another example of Crusader wall phasing, wrapped around the entire perimeter of the fortress to defend the foundations of the curtain walls. Figures 17 and 18 show a detailed construction profile. The glacis (slope) provided a smooth ashlar and mortar surface at a sixty-degree incline against the base of the wall. The engineers filled the interior of the glacis with rubble and mortar to provide bulk and strength. The massive structure protruded five meters at the base and rose to a height of 8.5 meters. The incline spanned ten meters. This author unsuccessfully attempted to scale the ashlar face. Despite seven hundred years of weathering, the surface remains free of finger holds and the steep incline adequately prevents foot traction for would be climbers. The Crusaders added the glacis to the preexisting curtain walls during the construction of Louis IX in 1251. Figure 19 illustrates the separate phasing between the earlier curtain wall and the added glacis.

Another notable feature of Crusader wall construction at Caesarea was the way the engineers recycled building materials from the city's past. A striking remnant of this method of construction is evident inside the east gate (Fig. 20). The Franks used Byzantine marble capitals and column bases to support their kurkar buildings and streets. Fortification engineers also used these fragments to provide fill material in the walls, not only for convenience, but also to add strength to their stone and masonry structures. Caesarea was rich in both marble and granite fragments, remnants of earlier Roman and

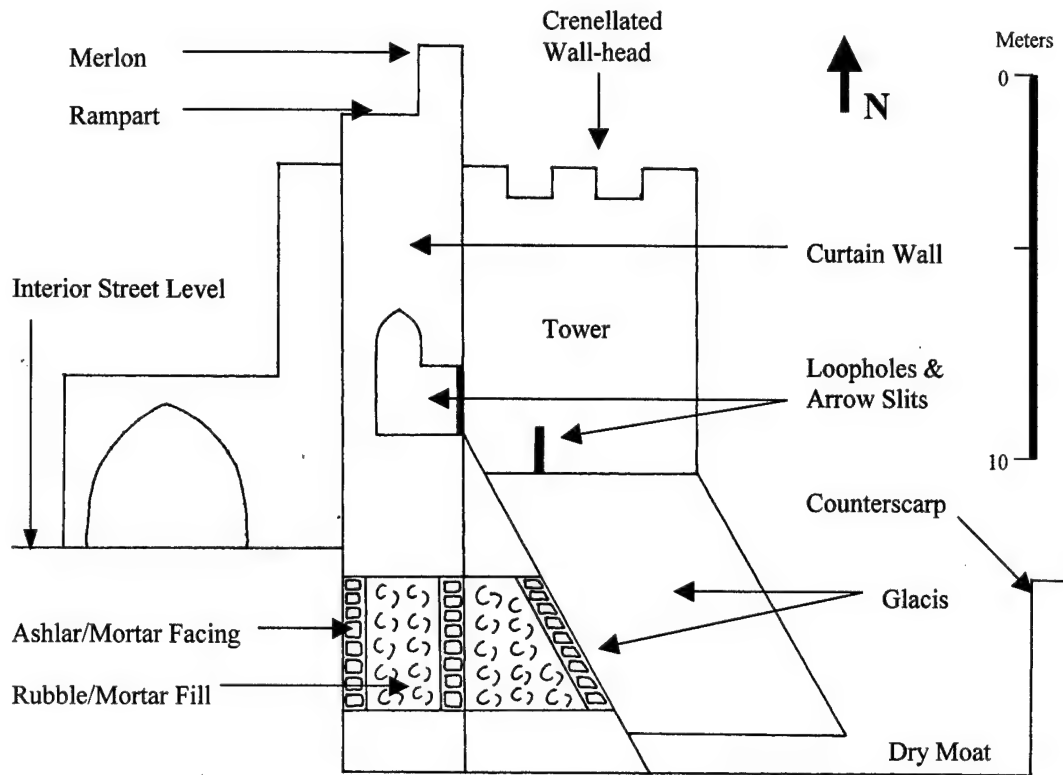


Figure 17. Curtain Wall Architecture. (Profile view north).
Scale aligned to foreground.



Figure 18. Remains of Curtain wall. (Profile view north).

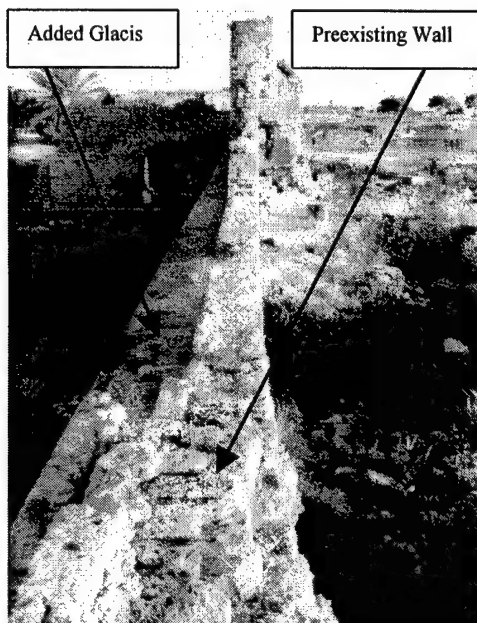


Figure 19. Crusader Phasing in Curtain Wall at East Gatehouse. (View south, profile). Louis IX added the gatehouse in 1251, along with the ashlar exterior facing (glacis).

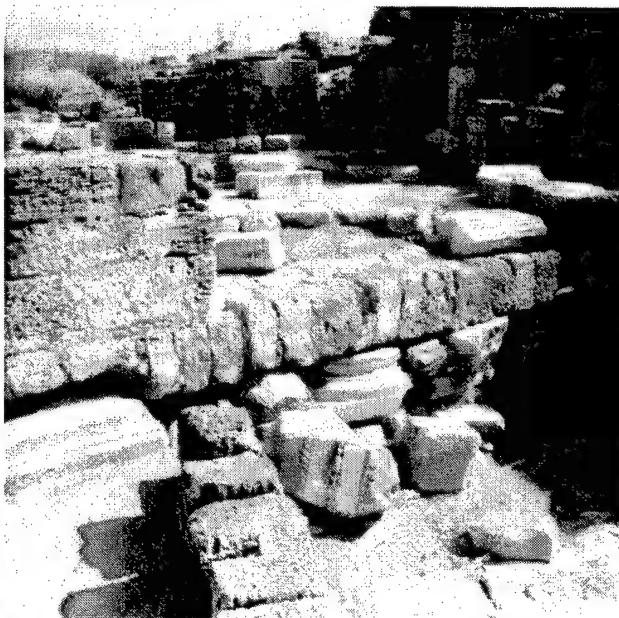


Figure 20. Crusader Street and Building Foundations. (View north, inside wall near entrance to east gatehouse). The Crusaders recycled Roman marble and granite fragments as building materials.



Figure 21. Granite Columns in Wall of East Gatehouse. (View west, east face of exterior wall). Roman columns were incorporated to strengthen the ashlar and mortar construction.



Figure 22. East Wall Moat and Counterscarp. (View north, from bridge of east gatehouse). The counterscarp (right) served as a retaining wall for the dry moat, preventing the enemy from gaining easy access to the glacis (left).

Byzantine occupation. Consequently, the Crusaders took advantage of these dense, heavy materials. Figure 21 shows two granite columns laid horizontally within the exterior wall of the east gatehouse. The Franks used antique columns in this way throughout Caesarea's fortification. They sought to fortify against the pulverizing force of the Muslim siege engines and block the enemy's attempts to mine and tunnel through the defensive barriers.¹⁴

Moat and Counterscarp

Medieval fortifications had to defend against two primary threats, bombardment and mining. Both operations relied on siege equipment including movable towers, catapults, and digging machines housed under protective movable platforms. The first priority of wall defense was to prevent the enemy from bringing their siege equipment near the fortress. For this reason, the designers took advantage of the local terrain, selecting high points and ridges along steep ravines to build their walls. However, at locations like Caesarea where no natural ravines existed, the engineers incorporated a concentric or double wall design in the outer perimeter to accomplish the same objective.¹⁵

The counterscarp was a lower outer wall surrounding the main wall (scarp) (Fig. 17). Together, the two walls formed a double line of defense. The counterscarp provided the first obstacle to attack, denying the enemy easy access to the main wall. The dead space between the two walls often took the form of a moat, creating a trap in

¹⁴ This building technique was common throughout the Latin East in both Crusader and Muslim fortifications. Marshall, *Warfare in the Latin East*, 104.

¹⁵ Concentric designs were in use long before the Crusades. Constantinople employed a double wall as early as the fourth century. Kennedy, *Crusader Castles*, 112.

which attackers were highly vulnerable to arrows shot from loopholes in the walls overhead. Laying siege to a fortified city required the besiegers to bridge the moat using earth and stone in order to bring their mining machinery and siege towers against the main wall.

Avraham Negev exposed Caesarea's moat and counterscarp in 1960-61 (Fig. 22). The counterscarp is still extant to a height of five meters around most of the city, serving as a retaining wall for the outer barrier of the moat. The vertical surface of the wall, a smooth ashlar and mortar construction, would have deterred the enemy from climbing down its sheer face. To jump from the top of the counterscarp to the moat would have risked almost certain injury. The moat itself is 9.5 meters wide from the counterscarp to the base of the glacis at the main wall. This provided a total protective space around the main wall of nearly fifteen meters from the top of the counterscarp to the curtain wall on top of the glacis. The moat was always dry since the Crusaders set the bottom elevation above sea level.

Projecting Towers

Beyond the passive protection features of the concentric moats and counterscarps, medieval architects also designed a system to combat the threats posed by enemy bombardment and intrusion. They spaced projecting towers at regular intervals around the curtain wall to counter both threats. These towers contained networks of access tunnels and loopholes and provided flanking positions to enable archers to clear the walls of enemy intruders. This flanking feature produced a crossfire effect, allowing shooters to target several points along the face of the wall. This design decreased the

total number of men needed to defend the walls by a third. It also reduced the need to station men in vulnerable positions on the tops of the curtain walls, thus minimizing casualties.¹⁶ In addition, the tower roofs provided elevated platforms from which catapult crews could launch missiles at greater distances. This advantage enabled the defenders to prevent the enemy from moving within range to endanger the fortification walls with their siege engines. Architecturally, the towers greatly enhanced the strength of the curtain walls. Designed to support the stresses of the catapults mounted above, their mass and rigidity bolstered the structural integrity of the fortification.

The first Crusaders in the twelfth century applied the concept of active wall defense somewhat ineffectively, importing Western architectural designs that failed the test against the rigors of Muslim siege warfare. In this early stage, projecting towers were square structures, protruding great distances from their adjoining curtain walls. This design performed poorly in combat since the large, flat surfaces of the outer walls easily flagged under the stresses of prolonged bombardment. In addition, the bulky square design created an unnecessarily large area of dead ground in front of the tower, space in which enemy infantry found refuge from arrow shot.¹⁷

Exposure to Muslim siege craft and the influence of Byzantine fortification design led the Crusaders to adopt new styles in their projecting towers by the thirteenth century. The concepts were far from original. Medieval castle builders had access to classic writers and consulted their scholarship for guidance. In his classic work on

¹⁶ Ian Hogg, *The History of Forts & Castles* (London: Macdonald & Co, 1988), 46.

¹⁷ Kennedy, *Crusader Castles*, 113.

military architecture, the Roman engineer, Vitruvius, discussed the problems of projecting towers in the following terms:¹⁸

The distances between the towers are so to be made that one is not further from another than a bowshot; so that if a tower is besieged anywhere, then, by "scorpions" and other missile engines from the towers right and left, the enemy may be thrown back. . . . For if the enemy occupies any part of the wall, the defenders shall cut them down, . . . The towers therefore are to be made round or polygonal. For engines more quickly demolish square towers, because the battering-rams beat and break the angles; whereas in the case of rounded surfaces, even when they drive the battering-rams wedge-fashion towards the centre, they cannot hurt them.¹⁹

Expressing the influence of Vitruvius at Caesarea, Louis IX's comprehensive refortification in 1251 incorporated polygonal projecting towers, rectangular rather than square. Few Crusader fortifications used round designs since their production demanded specialized stone cutting and workmanship, requiring more time to build. In addition, round-shaped towers fostered inefficient interior space and produced inadequate platforms for mounting large siege engines.²⁰

Incorporating defensive catapults (trebuchets) as a regular feature of castle design grew increasingly important as the Franks witnessed the disheartening effects of Muslim bombardment against their fortifications. By the thirteenth century, their use was common.²¹ Siege engines mounted on castle towers were effective in delaying enemy advance and prevented the devastation associated with mining and sapping. The increased range produced by the elevation of the fortification tower gave the defenders a

¹⁸ Pringle, introduction to *Crusader Castles*, xxvi.

¹⁹ Vitruvius, *On Architecture*, I, V, iv-v.

²⁰ Kennedy, *Crusader Castles*, 114.

²¹ Kennedy cites examples at Kerak (1183), Bourzey (1188), Beaufort (1268), Gibelacar (1271), and Margat (1285). The castle at Saphet had "a staff of no less than 300 balistarii to work the siege engines." He also points to the fact that Sultan Baybars became upset when the Franks at Jaffa erected catapults on their citadel "in spite of the fact that they were at peace." Kennedy, *Crusader Castles*, 118.

remarkable advantage against even the best siege engines positioned on the ground. Tower design in the thirteenth century had to accommodate the need for mounted catapults. The need for larger, stronger platforms increased even more as traction (manpowered) trebuchets gave way to heavier, counterweight designs. Engineers had to incorporate stone vaulted support structures to provide maximum height and stability. In addition, the space on the roof had to accommodate the machines and provide cover for their crews.²² Caesarea's towers, built by Louis IX in 1251, produced the space and strength needed to support this heavy machinery. Despite the absence of documents confirming the use of mounted artillery at the site, comparison with similar structures known to incorporate such equipment suggests the builders planned for this option at Caesarea.²³

The ruins of the projecting towers at Caesarea dominate the landscape of the medieval fortification. Apart from the massive corner towers (southeast, northeast, and northwest), thirteen standard projecting towers remain along the circuit of the curtain wall. There are two projecting towers along the north wall spaced forty meters apart, one incorporating the north gatehouse. The east wall has eight towers spaced at thirty-meter intervals, one serving as the east gatehouse. On the southern wall, three projecting towers stand at twenty-five meter intervals. These are grouped together in the middle near the south gate, leaving some sixty meters of open curtain wall on the east and a

²² Kennedy, *Crusader Castles*, 118; Donald Hill discusses the transition from traction to counterweight trebuchets during the late twelfth century. According to Hill, the counterweight design first appeared during the Crusades in the Mediterranean. Donald R. Hill, "Trebuchets," *Viator* 4 (1973): 103.

²³ At Château Pèlerin, artillery towers were twenty-eight by eighteen meters (504 square meters platform area). Muslim artillery towers at Damascus were thirty by twelve meters (360 square meters). Kennedy, *Crusader Castles*, 188. Caesarea's corner towers, although smaller in length, provided a platform approximately fourteen by fifteen meters (210 square meters).

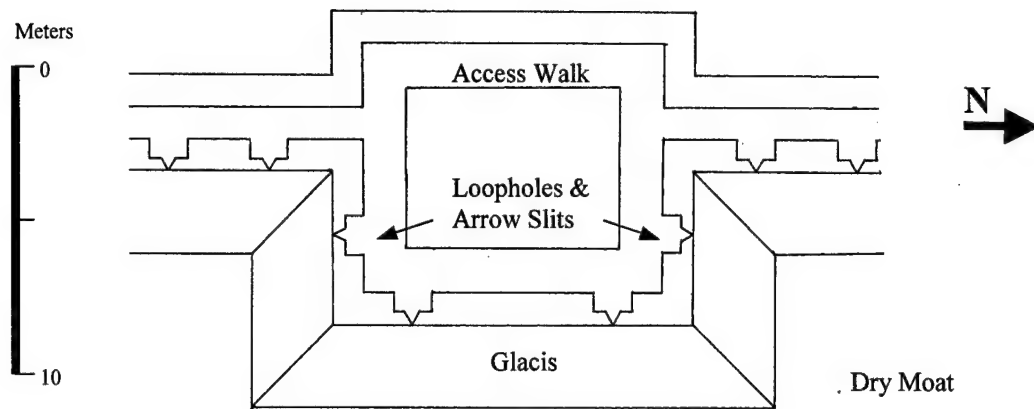


Figure 23. Projecting Tower Top Plan.

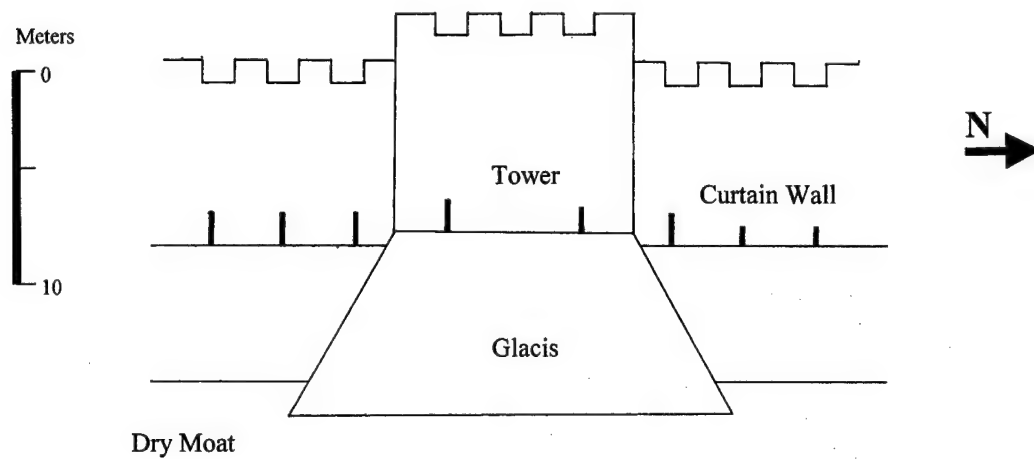


Figure 24. Projecting Tower Elevation. (View west).

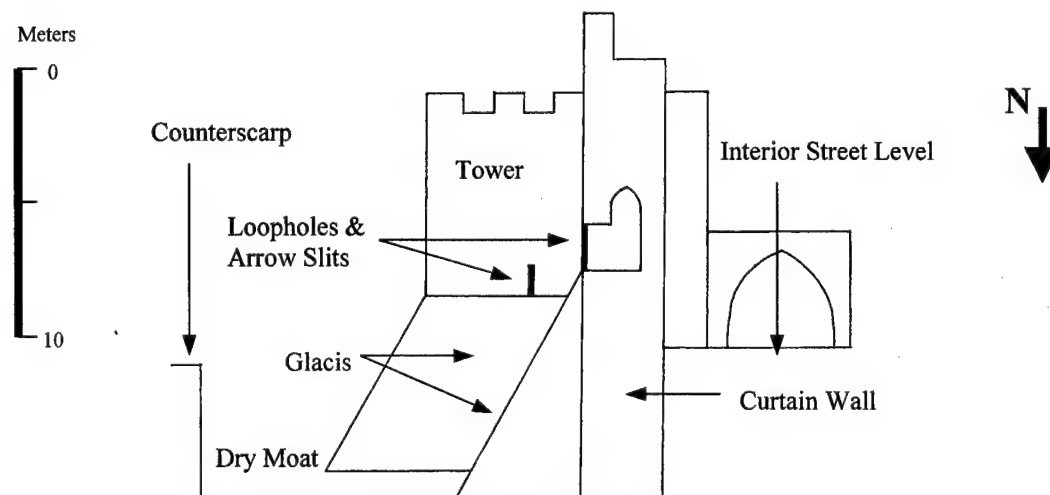


Figure 25. Projecting Tower Profile. (View south).

hundred meters on the west. The Crusaders apparently compensated for these larger spans in the south by increasing the thickness of the wall to approximately 3.5 meters (as opposed to 2.85 meters on the east). Figures 23-25 show a reconstructed sample tower along the east wall, just south of the east gatehouse. Viewed from the top (Fig. 23), the tower is rectangular and protrudes from the curtain wall 4.8 meters. The east face is 11.49 meters wide. Figure 24 shows the tower completed to its full height, ten meters above the glacis, with crenellated wall-head (only 1.5 meters of the tower wall remains in situ). Crenellated battlements are assumed, based on the typical Crusader architecture represented in the twelfth century seal of Caesarea. The glacis from the curtain wall wraps around the bottom of the tower to secure the base and provide a continuously smooth defensive surface. The interior serves four loophole positions with an access walk, stationed at the level where the glacis meets the vertical tower wall (eight meters above the moat). Two of the loopholes provide flanking fire, covering sections along the curtain wall to the north and south of the tower. The other loopholes face toward the counterscarp, defending against enemy approach from the east. Each loophole has an arrow slit 1.5 meters high with a downward sloping lower surface to permit arrow trajectory to the base of the walls.

The remains of the corner towers are larger and slightly more complex in design than the standard projecting towers. The southeast tower is the best preserved and serves as the model for the illustrations in figures 26 and 27. Viewed from the top, the tower projects outward from the east and south walls by six meters (Fig. 26). The tower is rectangular in design, 13.74 meters wide on the south face by 15.29 meters on the east. Similar to the projecting tower, the glacis from the curtain wall wraps around the base of

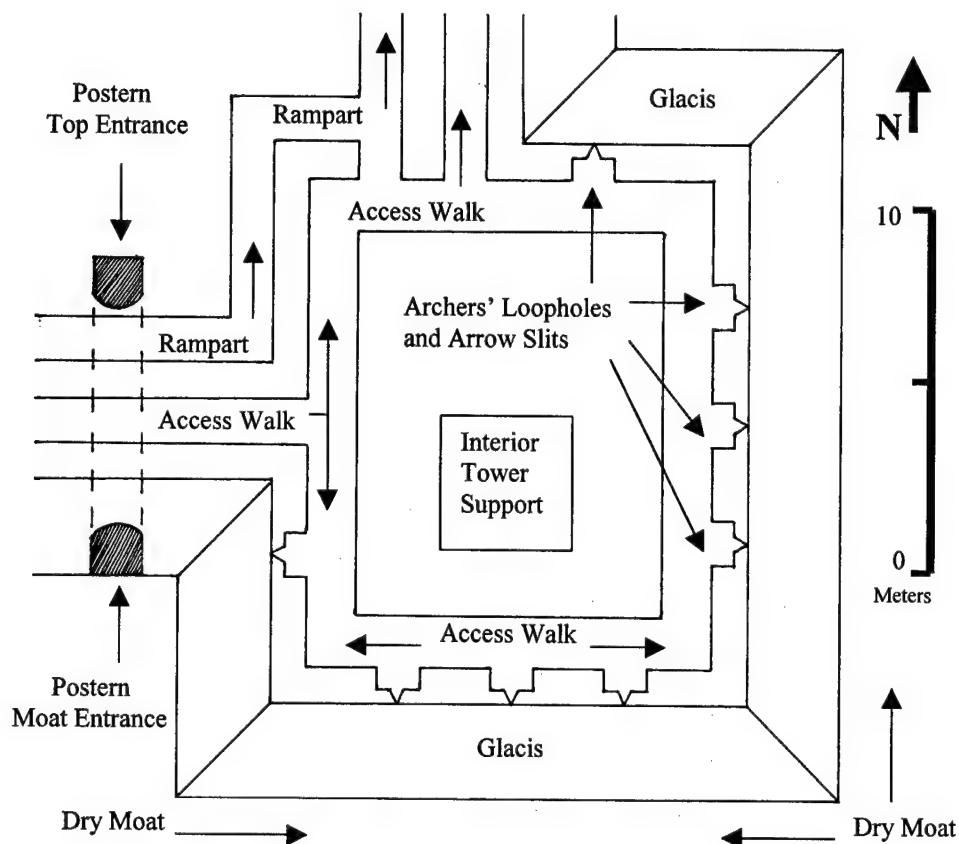


Figure 26. Southeast Tower Top Plan

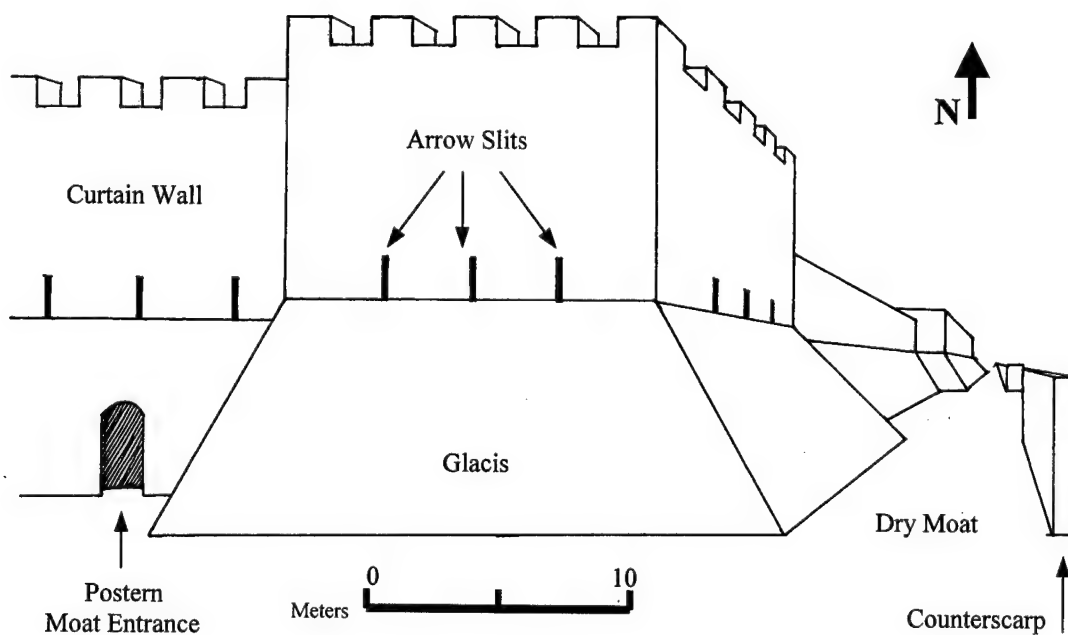


Figure 27. Southeast Tower Elevation. (View north).

the tower in continuous fashion. The original tower wall stood ten meters above the glacis with a crenellated wall-head. In situ, only 1.5 meters remains. A continuous access walk joins the defensive positions inside the tower. This passageway leads to a rampart walk behind the tower and along the inside of the curtain walls, ending in a down stairway. In addition, the access walk appears to provide access to archers' loopholes inside the adjoining curtain walls. There are eight archer's loopholes within the tower itself. Similar to the projecting towers, these are set at the level where the glacis meets the vertical tower wall (Fig. 27). Two loopholes provide flanking fire along the curtain walls to the west and north. The remaining six loopholes target the moat and counterscarp, three directed eastward and three facing south. Another feature associated with the tower design is a secret passageway. This tunnel begins from an opening behind the south curtain wall and follows a staircase down to the moat, opening just below the loophole on the west side of the tower glacis (Fig. 27).

Posterns

The Crusaders incorporated three easily defended access tunnels, a vital feature of Caesarea's fortification plan, in the north, south, and east city walls. Referred to as posterns or salley ports, these secret passages allowed the defenders to exit the city in time of siege without opening the city gates. In this way, the defenders could conduct swift sorties against the besiegers, disrupt the enemy's siege works, and dispatch spies and messengers to neighboring cities. The best-preserved postern is located in the east wall adjacent to a projecting tower thirty meters north of the east gate. The sloping stairwell and passageway, seven meters long, three meters high, and one meter wide,



Figure 28. East Postern Top Entrance.
(View east, interior east wall).

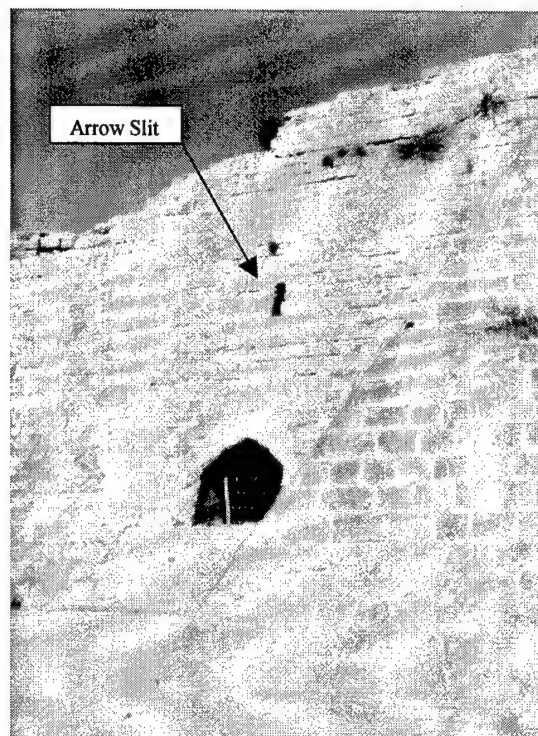


Figure 29. East Postern Moat Entrance.
(View west, glacis along east wall). Arrow slit positioned two meters above arched opening.



Figure 30. South Postern Top Entrance.
(View south, interior south wall). Opening measures approximately one meter wide.

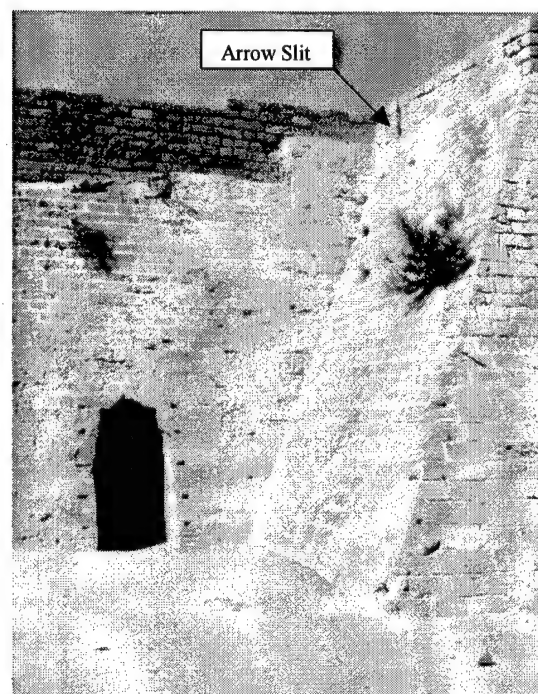


Figure 31. South Postern Moat Entrance.
(View north, glacis along south wall). Opening covered by arrow slit in southeast corner tower.

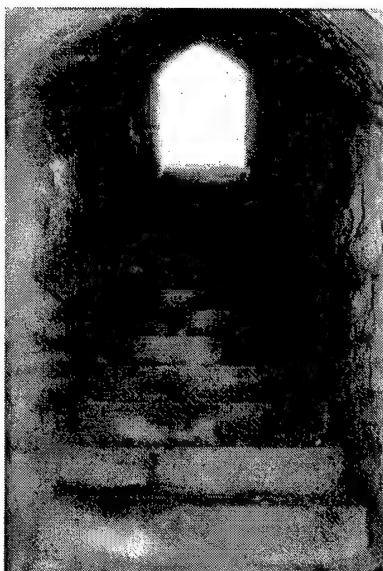


Figure 32. South Postern Interior. (View north from moat entrance). Passage is one meter wide to allow single file passage.

Figure 33. North Postern Top Entrance. (View north, interior north wall). Exit at the bottom of the moat is sealed.

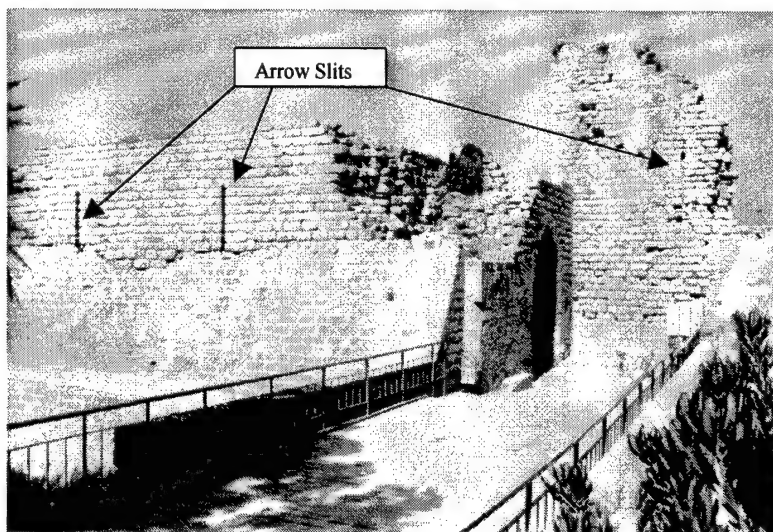


Figure 34. Approach to East Gatehouse. (View west, from counterscarp). This modern bridge stands in place of the Crusader drawbridge which enabled access across the moat. Arrow slits in the gatehouse tower and curtain wall provide cover for the bridge and gate main entrance (left at end of bridge).



Figure 35. Drawbridge Across East Moat. (View north, south face of bridge from counterscarp). The stationary section of the bridge rests on four stone arches, reaching from the glacis to the middle of the moat. The removable section, as seen today, was constructed of wood.

runs from an upper level inside the city to the glacis in the bottom of the east moat (Figs. 28 and 29). A small arrow slit opening two meters above the moat entrance, accessed from the ceiling of the passageway, allowed the defenders to inspect and guard the exterior opening. In addition, placing the postern next to a projecting tower allowed the archers to secure the postern entrance from loopholes eight meters above (Fig. 29). The postern in the south wall (fourteen meters long) is adjacent to the southeast corner tower, while the one in the north (seven meters long) lies adjacent to the northeast corner tower (Figs. 30 and 31). Both passageways are similar in design to the east postern, having sloping stairwells large enough to accommodate armed soldiers in single file (Fig. 32). Although these narrow passageways prohibited equestrian traffic, their limited size enhanced security against enemy intrusion. In times of crisis, the defenders easily sealed the postern entrances. The north postern (Fig. 33) remains blocked with stone and mortar at the moat entrance, blocked during the siege of Sultan Baybars in 1265.²⁴

East Gatehouse

The east gatehouse, one of the city's most significant fortification structures, demonstrated how the Crusaders adopted certain aspects of eastern military architecture to counter the threats posed by Muslim siege warfare (Fig. 36). The east gatehouse, an indirect access gate set within the interior of a projecting tower, incorporated a bent entrance design. Deschamps was among the first to suggest that the bent entrance was a common feature of Byzantine fortification. He argued that the Franks learned the

²⁴ Stern, "Caesarea," 277-278; Benvenisti, *Crusaders in the Holy Land*, 143.

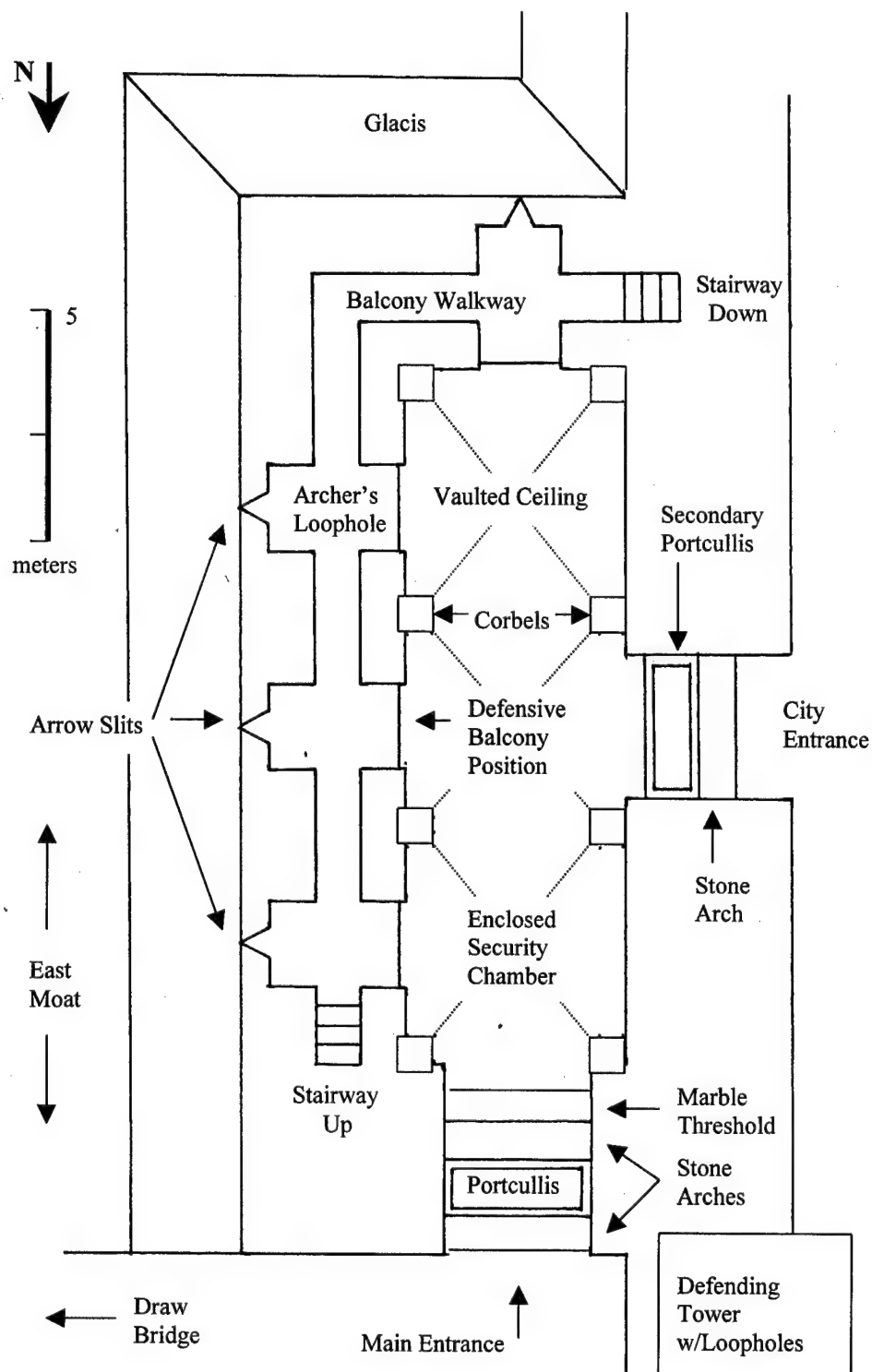


Figure 36. East Gatehouse Top Plan.

technique in the East and adopted the design from Byzantium in the middle of the thirteenth century.²⁵ Although some writers proposed the bent entrance was of Muslim origin, recent scholarship on late sixth century fortifications in North Africa supports Deschamps' thesis.

Avraham Negev excavated and reconstructed Caesarea's east gatehouse during his medieval fortification study in 1960-61. He discovered two phases of Crusader construction. Electromagnetic soundings on the western side of the existing structure, the primary city wall, revealed the doorposts of an earlier gate, predating the construction of Louis IX in 1251. The early gate was a direct access design. Unlike Louis' modification, its entrance was wider and did not feature any defensive entry hall. Louis added doorposts of small stones to decrease the size of the original passageway and formed the bent entrance by building a projecting tower to enclose the entrance to the old gate.²⁶

Negev's reconstruction of the east gatehouse stands as one of the best examples of thirteenth century fortification architecture visible in Israel today. Serving as the main entrance to the city, Caesarea's citizenry approached the gate heading west, crossing a bridge that provided access across the moat (Fig. 34). The bridge consisted of stationary and movable sections (Fig. 35). Four stone arches and pillars supported a span of six meters, leaving a remaining four meters for a removable drawbridge.

²⁵ Although Creswell denied the existence of such Byzantine examples in 1951, Pringle's 1981 study cited the existence of two Byzantine bent entrances in North Africa. These are the late sixth-century forts of Anastasiana and Tignica. Denys Pringle, *The Defense of Byzantine Africa from Justinian to the Arab Conquest: An Account of the Military History and Archaeology of the African Provinces in the Sixth and Seventh Centuries*, Part 1, British Archaeological Reports International Series 99, (Oxford: BAR, 1981), 170; K.A.C. Creswell, "Fortification in Islam Before A.D. 1250," *Proceedings of the British Academy* 38 (1952): 99-105; Pringle, introduction to *Crusader Castles*, xxxviii; Stern, "Caesarea," 277.

²⁶ Stern, "Caesarea," 278.

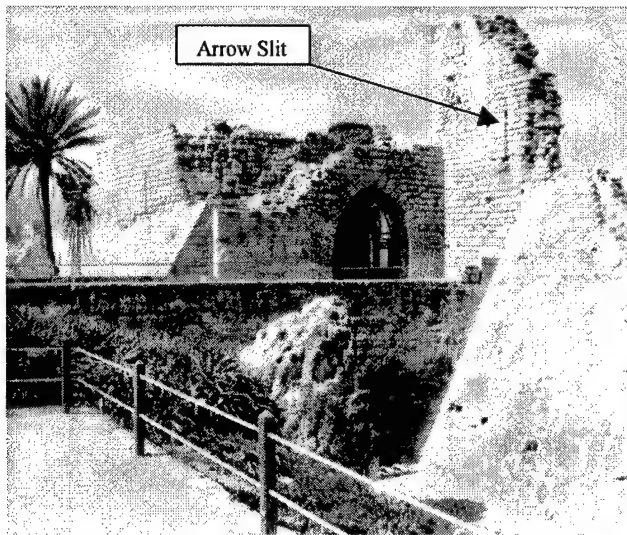


Figure 37. (Above) Entrance to East Gatehouse. (View south, from counterscarp). Those who entered the main entrance were required to make a sharp left turn, exposing their right, unshielded side to the arrow slit above.

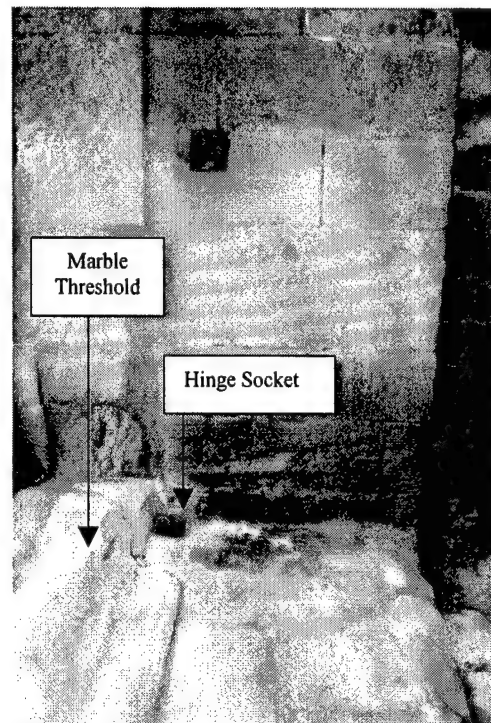
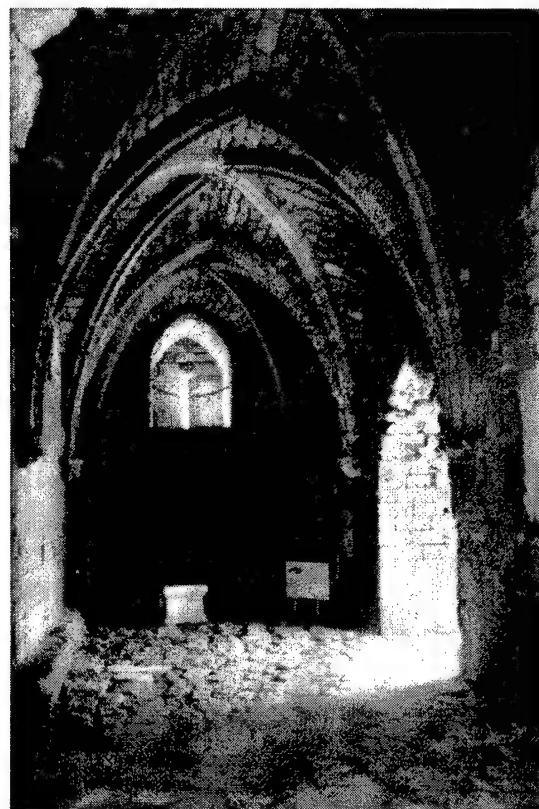


Figure 38. (Right) East Gatehouse Marble Threshold and Hinge Socket. (View east, entryway interior). Heavy wooden doors allowed the defenders to seal the entrance.



Figure 39. (Above) East Gatehouse Portcullis. (View of entryway ceiling). Situated between two stone arches, the portcullis opening supported a vertically sliding iron gate.

Figure 40. (Right) East Gatehouse Hall Interior. (View south). Reconstructed by Negev (1960). Corbels support the vaulted stone ceiling. One of the four defensive balcony positions visible at the top of the back wall. Well, watering basin, and bench in corner below. City entrance is through the archway opening on the right.



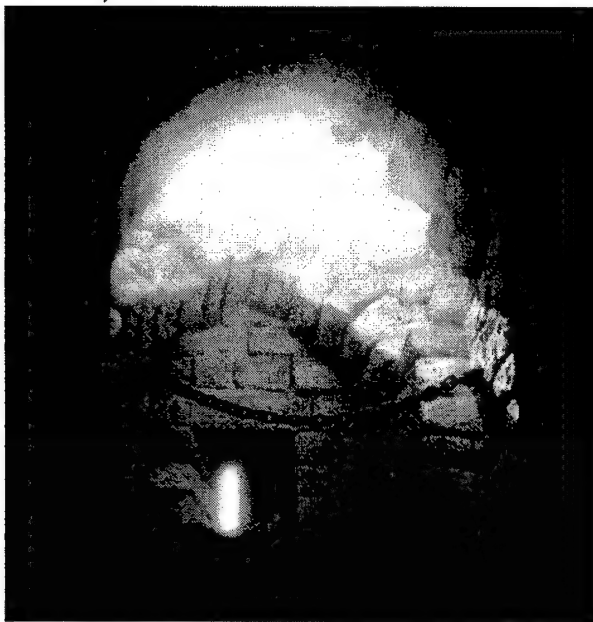


Figure 41. East Gatehouse Balcony Defensive Position. (Interior view, east gatehouse wall). There are four balcony openings in the east gatehouse connected by an access hallway. An archer's loophole at the back of each provides an arrow slit targeting the east moat.

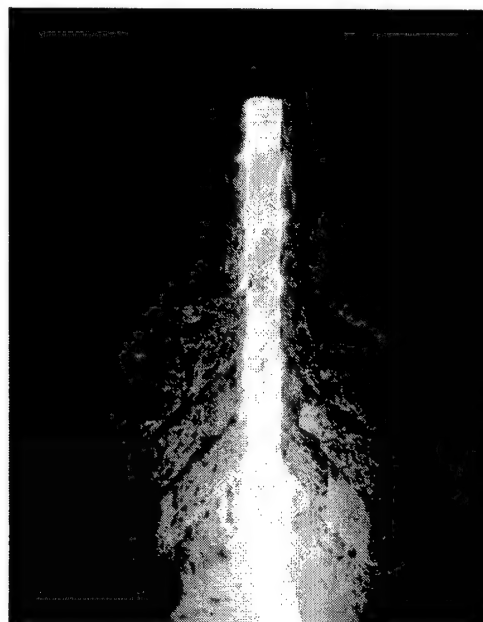


Figure 42. Arrow Slit Inside Archer's Loophole. (View east, interior of archer's loophole in east gatehouse).



Figure 43. East Gatehouse Upper Balcony. (View north, east wall inside access hallway). On the left, balcony opens into vaulted ceiling of gatehouse. On the right, archer's loophole. At the end of the hallway, stairway up to the projecting tower.



Figure 44. City Gate Opening from East Gatehouse. (View east from Crusader street). This interior gate had a secondary portcullis to prevent intruders leaving the gatehouse and entering the city.

Archers posted behind arrow slits in a tower five meters above the west end of the bridge stood ready to discourage hostile adversaries. At the west end of the bridge, an immediate left turn was necessary to enter the gatehouse (Fig. 37). This left turn, in accordance with classical military fortification design, served to expose an enemy's unshielded side to the archers.²⁷ According to Vitruvius' instruction, "The approach must be . . . so devised that the ways to the gates are not straight, but on the left of the wall. For when it is so done, then as the troops approach, their right side will be next the wall and will not be protected by the shield."²⁸ The main entrance to the gatehouse, as it stands today, is 3.15 meters wide and four meters deep, incorporating two stone arches providing support for a vertically sliding iron gate (portcullis) and a heavy wooden door with a marble threshold (Figs. 38 and 39). The interior hall of the gatehouse (Fig. 40) is rectangular (4.6 by 14.6 meters) with a vaulted stone ceiling six meters high resting on eight stone supports (corbels). Paved with small stone slabs, the floor once incorporated a bench along the eastern wall and a well and basin at the southwest corner, perhaps intended for watering horses.²⁹ An upper balcony in the gatehouse provided defenders with four positions from which they could pour down cauldrons of boiling pitch or oil on the heads of intruders. Soldiers reached the upper level through a stairway in the west wall of the gatehouse. The defensive positions in the balcony had open areas behind them that incorporated loopholes and arrow slit openings to the outside. The balcony network thus served two practical functions, one aimed at repelling attackers on the exterior, the other allowing for defense inside the gatehouse (Figs. 41-43). The only exit

²⁷ Holum, *Herod's Dream*, 230.

²⁸ Vitruvius, *On Architecture*, I, V, ii.

²⁹ Holum, *Herod's Dream*, 230.

from the hall was the gate in the west wall, 3.15 meters wide, opening to one of the central Crusader streets in the city (Fig. 44). This gate, similar in design to the main entrance, provided a stone archway and secondary portcullis to insure enemy containment inside the gatehouse if necessary.

North Gatehouse

The north wall also incorporated an indirect access gatehouse set in a projecting tower similar in design to the east gate (Fig. 45). A stone arched bridge spanned half the distance of the moat, providing a defensive gap near the counterscarp for a removable drawbridge. The exterior main entrance faced west and was similar in dimension to the east gate (3.2 meters wide by four meters deep), providing room for a portcullis and door. Unlike the east gatehouse, the interior hall was square with walls measuring 8.25 meters in length. The north gatehouse had a stone vaulted ceiling supported by four capitals set in the interior corners.³⁰ Although the gatehouse had a stairway leading to the tower above, there is no indication of an upper defensive balcony similar to the east gate. This fact, along with the hall's smaller dimension, suggests that the north gate functioned as a secondary city entrance.

North Supply Gate

In addition to the north gate, a second passageway in the north wall provided access for supplies and war machinery. Near the seashore just west of the gatehouse,

³⁰ Denys Pringle, *Secular Buildings in the Crusader Kingdom of Jerusalem: An Archaeological Gazetteer* (Cambridge: Cambridge University Press, 1977), 44.

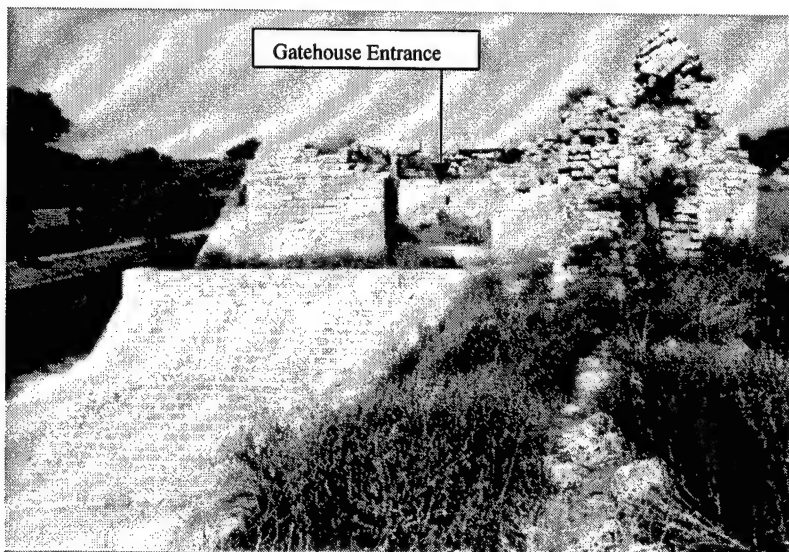


Figure 45. Remains of North Gatehouse. (View east). Similar to the bent entrance of the east gate, the north gatehouse entrance opened to the side along the wall. An arched stone bridge spanned half the moat, providing a gap for a removable wood section.

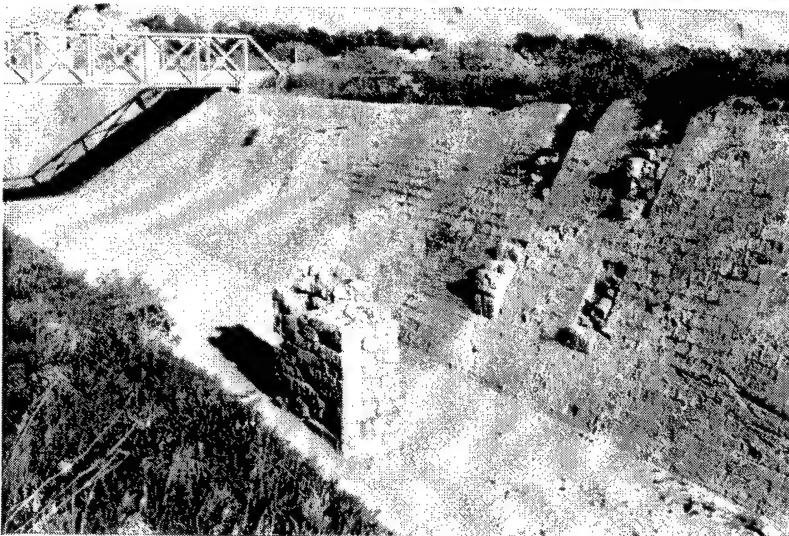


Figure 46. Remains of Supply Gate Bridge. (View east from counterscarp). The supply gate provided carriage passage through a direct access entryway. The stone bridge, supported by double arches, reached from the glacis to the middle of the moat. A removable wood section completed the span to the counterscarp. Remains of the north gatehouse are visible on the far side of the modern bridge.

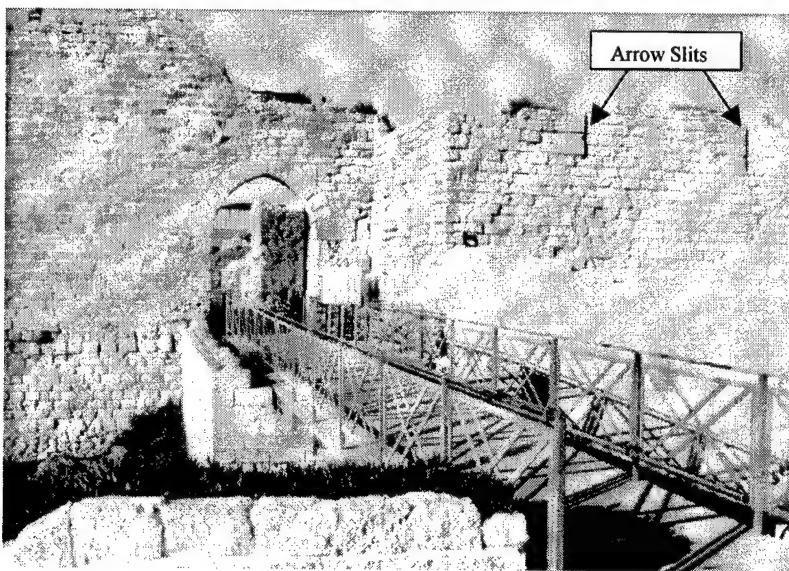


Figure 47. Approach to South Gate. (View north from counterscarp). Although based on a design similar to the north gate, the Crusaders never completed the bent entrance for the south gate. It remained a direct access gate. Archers defended the approach from arrow slits in the projecting tower to the right.

this entrance called for a third bridge similar in design to those of the east and north gates. Supported by a heavy buttress in the center of the moat, this double stone arched bridge supported a removable extension spanning four meters from the buttress to the counterscarp (Fig. 46). Since the Franks designed this gate for carriage and cargo, the entrance itself was a direct access type, closed off completely in time of siege.

South Gate

There was also a gate in the southern wall, possibly in use well before Crusader occupation in 1101. Yoseph Porath excavated an area beneath the gate in 1989-90 and identified three earlier medieval phases.³¹ According to Negev, this entrance, although intended to incorporate a gatehouse, never reached completion. The Crusaders succeeded in constructing only the outer gateway, based on a design similar to the north gatehouse. Partially reconstructed, the south gate stands in situ as a direct access entry way (Fig. 47). The gate itself is approximately three meters wide and 3.5 meters deep with a double stone archway to provide room for a portcullis and heavy wooden door (Figs. 48-50). The exterior of the gate, like the east gatehouse, is defended by an arrow slit positioned above and to the right (undefended side) of the unsuspecting intruder (Fig. 48).

Harbor

An access for supply, communication, and evacuation, the Crusader architects maximized the potential of the Herodian harbor in the design of their fortification.

³¹ Stern, "Caesarea," 286.

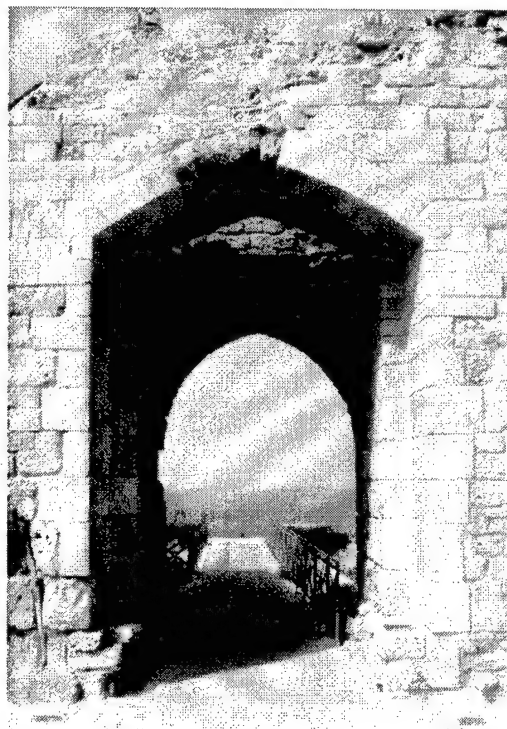


Figure 48. (Above Left) Entrance to South Gate. (View east). Arrow slit covers right side (undefended side) of those entering.

Figure 49. (Above Right) Interior of South Gate. (View south).



Figure 50. (Left) South gate Hinge Sockets and Portcullis. (View of entryway ceiling). Heavy wooden doors and vertically sliding iron gate allowed the defenders to seal the entrance.



Figure 51. Inner Harbor. (View south, inside breakwater of granite columns along line of western fortification wall). Remains of the citadel stand on the Herodian southern breakwater.



Figure 52. Breakwater of Granite Columns. (View west). The Crusaders recycled Roman and Byzantine columns to construct a breakwater to form the northern side of the inner harbor.

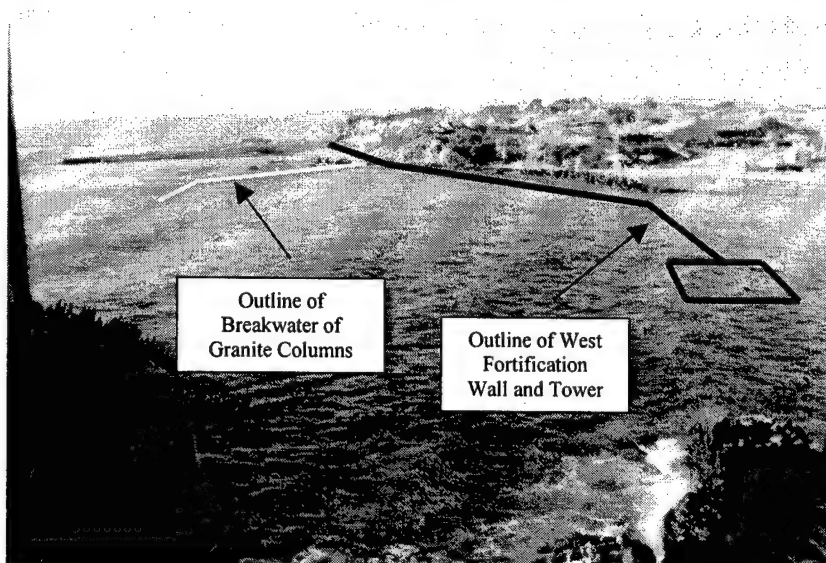


Figure 53. Crusader Harbor Architectural Features. (View north from citadel). The breakwater of granite columns shielded the northern side of the harbor. The western fortification wall extended into the bay, joining a square projecting tower in the middle. The foundations of these structures lie submerged below the harbor.

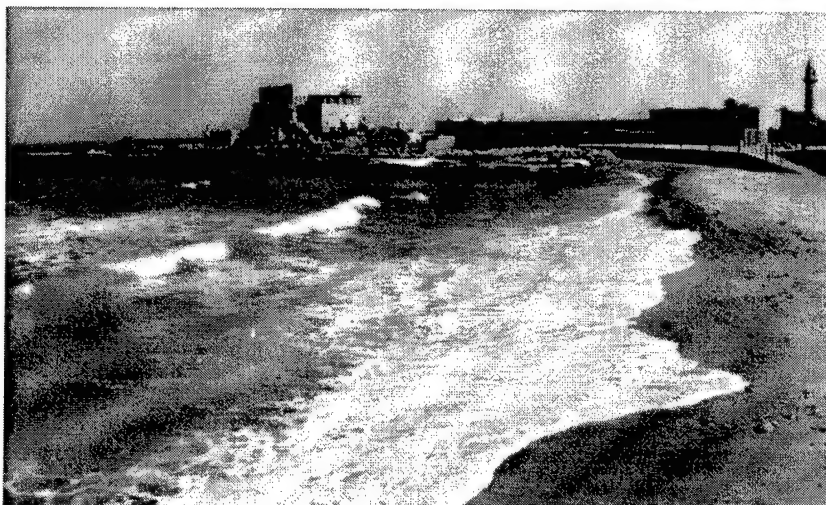


Figure 54. Citadel. (View north from south shoreline). The sea moat separating the citadel from the city connected the inner harbor to the south shoreline.

Although the structures of the ancient harbor, including some of the breakwaters, had deteriorated and fallen below sea level due to tectonic action, the Crusaders used available materials to construct a smaller harbor basin.³² The engineers formed a breakwater of Roman granite columns tied together with a mortar and stone construction to shield the northern side of the quay (Fig. 52). This makeshift jetty projected one hundred meters into the Herodian harbor. The architects built a fortress tower in the middle of the bay to establish the terminal end of the west fortification wall. This tower guarded a harbor passage forty meters wide, allowing smaller vessels to sail through the opening and dock safely within the city walls (Fig. 53). In an emergency, the Crusaders could pull an iron chain across the entrance to prevent approach of enemy ships.³³

Citadel

The citadel was another significant structure of the Crusader fortification plan, built on a projecting remnant of the Herodian breakwater at the southwest corner of the city (Fig. 54). Similar in design to the other walled cities along the Mediterranean, the harbor fortress stood outside the city walls.³⁴ The Crusaders built the citadel to function as an independent defensive unit. It stood apart from the mainland, separated by a twenty meter wide, water-filled channel connecting the harbor to Caesarea's south shore line. The citadel's isolated location provided a critical defensive position at the mouth of

³² Raban's study shows that most of the Herodian breakwaters had submerged by the third century CE. Avner Raban, "Two Harbours for Two Entities," in *Caesarea Papers: Straton's Tower, Herod's Harbour, and Roman and Byzantine Caesarea*, ed. Robert L. Vann, *Journal of Roman Archaeology Supplementary Series 5* (Ann Arbor: University of Michigan, 1992), 70.

³³ Stern, "Caesarea," 290; Holum, *Herod's Dream*, 234.

³⁴ There were eight coastal cities: Gaza, Ascalon, Jaffa, Arsuf, Caesarea, Haifa, Acre, and Tyre. Benvenisti, *Crusaders in the Holy Land*, 75; Robin Fedden & John Thompson, *Crusader Castles* (London: William Clowes and Sons, 1957), 33.

the harbor. In addition to defending the city from seaborne invasion, the citadel's harbor access facilitated maritime communication during time of siege. It also served as a fallback position when the rest of the city fell to the enemy, and as a last resort, allowed for emergency evacuation by sea.³⁵

Avraham Negev conducted limited trial soundings in the citadel in 1960-61. His research concluded that the Crusaders built the fortress in the twelfth century or at the beginning of the thirteenth. However, like much of Caesarea's fortification structures, the harbor fortress may have had earlier Islamic foundations as well.³⁶ The first report of Crusader work on the citadel was during Leopold VI's fortification efforts in 1218. This building project concentrated almost exclusively on rebuilding the harbor fortress following Caesarea's first great defeat at the hand of Badr ad-Din in 1187.³⁷ Louis IX's massive reconstruction effort in 1251 also enhanced the strength of the citadel.

The Crusaders defended the east face of the harbor fortress with a massive, sloping stone buttress rising from the water channel. They flanked this wall with projecting towers, one at each end. A removable bridge spanned the moat separating the citadel from the main city. The Franks also built walls and towers around the perimeter of the peninsula, enclosing a central building and main tower rising three stories high. The builders inserted a network of granite columns within their ashlar and mortar

³⁵ Such evacuations were recorded during the siege of al-Mu'zzam at Caesarea in 1219-1220 when the Genoese fleet rescued the inhabitants. Van Donzel, "Kaysariyya," 842.

³⁶ Holum suggests an Islamic citadel predating Crusader occupation stood on the same site. Holum, *Herod's Dream*, 231.

³⁷ Van Donzel, "Kaysariyya," 842.

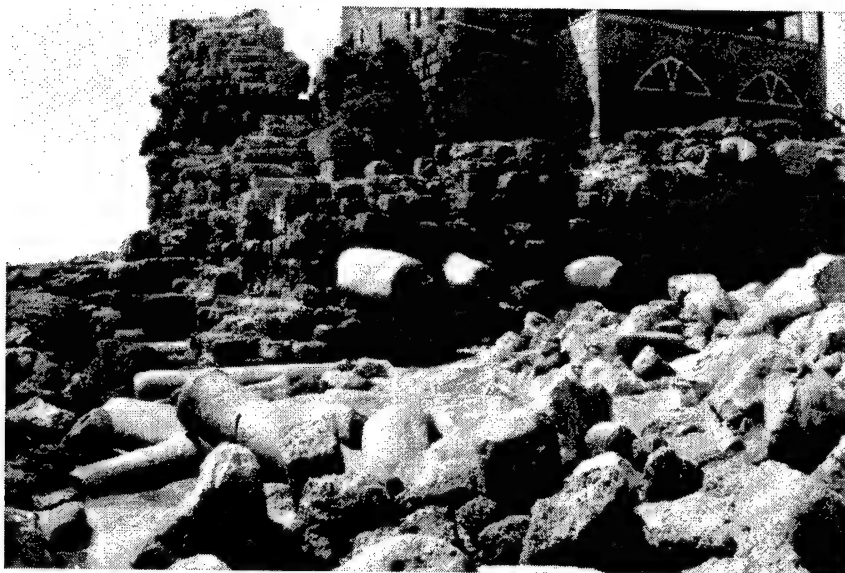


Figure 55. Exposed Foundations of Citadel Moat and Fortification Wall. (View west along south shore of breakwater). The Crusaders used granite columns in their walls to counter Muslim mining tactics.

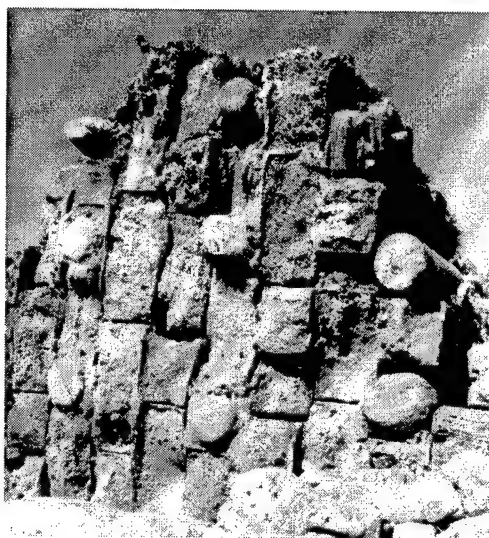


Figure 56. Section of Citadel Tower. (View east). One of a few large remaining sections of the tower and wall. Ashlar and mortar construction tied together with granite columns.

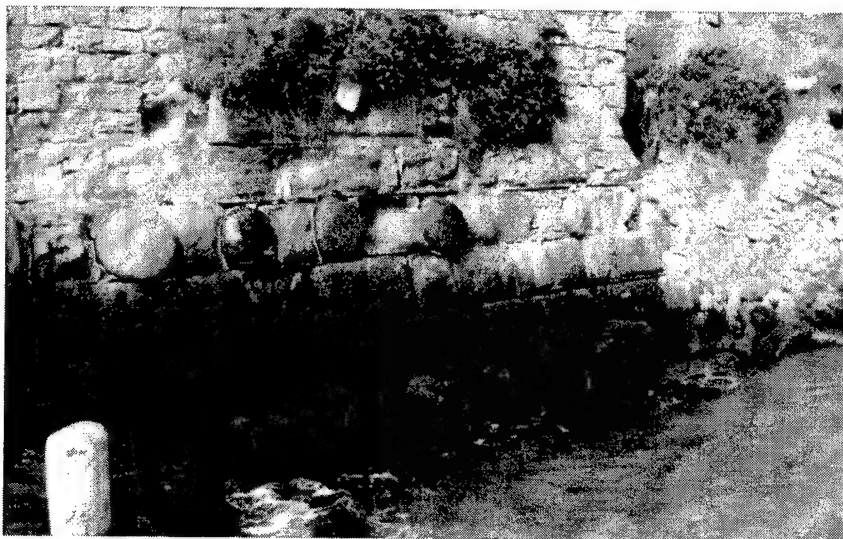


Figure 57. Citadel Foundation Inside Inner Harbor. (View southwest of exposed north wall). Baybars attempted to mine the citadel in 1265 but failed due to the numerous granite columns incorporated into the construction.

construction to strengthen the foundations and buttresses. During the siege of Baybars in 1265, Muslims attempted to mine the harbor fortress but the massive columns discouraged their efforts. Today, only large sections of these column-laced fortifications remain (Figs. 55, 56, and 57). In addition to serving as a formidable refuge, the citadel provided secure access to the sea. In 1219, and later in 1265, the Crusader refugees in the harbor fortress evacuated by ship to escape the Muslim invaders.³⁸ Negev's exploration exposed a small gateway with flights of stairs on the northeast corner, providing direct access from the harbor to the fortress. He also identified vaulted passages with stairways leading to a vast underground chamber beneath the citadel and to the main gate of the Citadel on the east side.³⁹

Herodian Platform

Although not a regular component of the defensive system at Caesarea, the Herodian platform was significant as the point of high ground inside the fortification. King Herod constructed this artificial mesa using vaults and chambers to provide a podium approximately one hundred meters square for his temple to Roma and Augustus. Today, the west façade of the platform stands fifteen meters above the city elevation along the inner harbor (Fig. 58). The back of the podium, the eastern side, slopes gradually toward Caesarea's southwest corner. Literary sources and archaeological evidence show Caesarea's inhabitants always viewed Herod's platform as a high place,

³⁸ Hazard, "Caesarea," 87.

³⁹ Stern, "Caesarea," 278; Negev, *Caesarea*, 79-81.

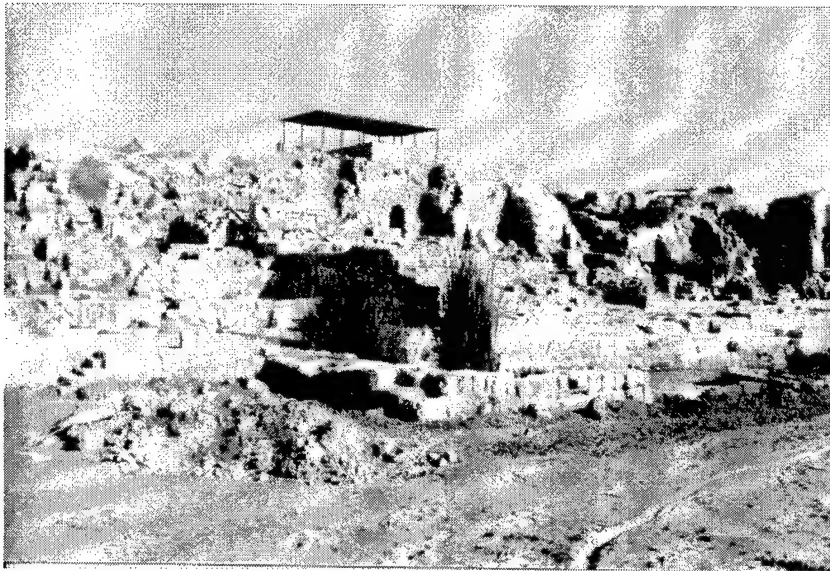


Figure 58. West Facade of Herodian Platform. (View east). Herod's platform served as the monumental center of the city throughout its history. This high ground served as a temporary fall back position for the city inhabitants in time of siege.



Figure 59. Remains of Cathedral of St. Peter. (View west from southeast corner of Herodian platform). This church, dating to Louis IX's construction, collapsed before its completion.

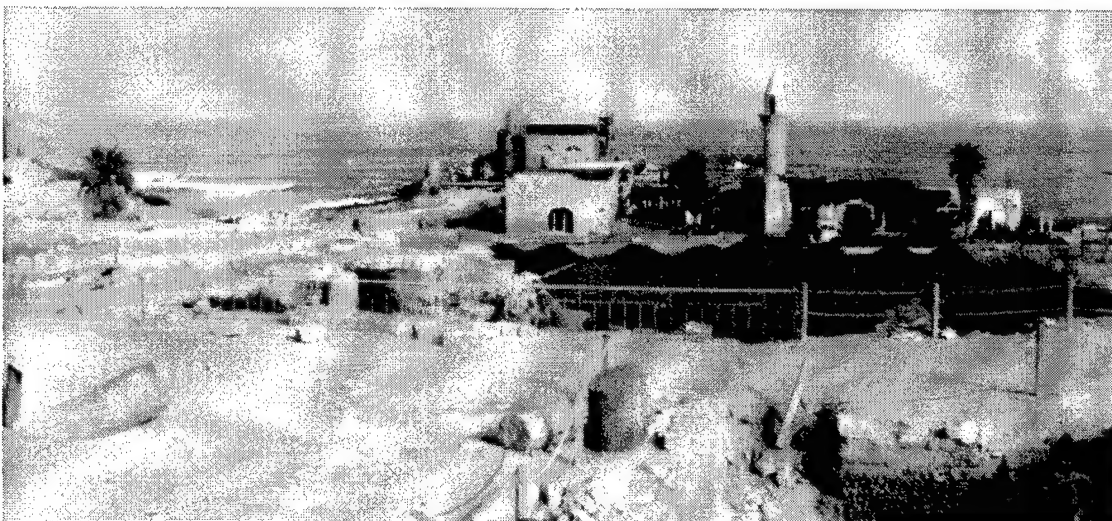


Figure 60. (Below) Citadel and Inner Harbor from Herodian Platform. (View west). Baybars used this elevation to launch catapult fire against the citadel in 1265.

both literally and ritually.⁴⁰ Negev's initial work on the platform in 1960-61 exposed the remains of a Crusader church he identified from the literary sources as the Cathedral of St. Peter (Fig. 59).⁴¹ The Franks halted construction on the church when a portion of the Herodian vaulting collapsed under the weight of the half-completed structure.

Tactically, the platform was both an aid as well as a nemesis to the city defenders. During the initial Crusader conquest of 1101, one chronicler reported the Muslims retreated to a secondary line of defense inside the city. When this last attempt failed, they sought refuge inside the Great Mosque which occupied "an elevated position in one section of the city."⁴² While perhaps providing a temporary fall back position, the high ground of the Herodian platform, once seized and occupied, also granted the invading army a decisive advantage. During the Muslim siege of 1265, the Crusaders found refuge in the citadel after Baybars and his army broke through Caesarea's fortification walls. However, Baybars repositioned his catapults and used the elevation of the Herodian platform to launch a relentless attack against the harbor fortress, compelling the Crusaders to surrender within six days (Fig. 60).⁴³

⁴⁰ The first of these sacred structures was Herod's temple to Roma and Augustus. Later, the Byzantine Christians built an octagonal church dedicated to St. Procopius, incorporating Herod's temple foundations in their construction. This author excavated portions of both structures in 1997-98. After the fall of Caesarea to Islam in 640, literary sources suggest the Muslims transformed the octagonal church into a great mosque. In the Crusader period, chroniclers report that Baldwin I, following the capture of Caesarea in 1101, rededicated the great mosque as the Cathedral of St. Peter. Archaeological evidence for the actual site of the mosque and Cathedral remains inconclusive. Hazard, "Caesarea," 82-83; Holum, *Herod's Dream*, 235.

⁴¹ The identification is somewhat misleading since, according to the literature, the original Cathedral of St. Peter was the same structure that had been the former great mosque. It is likely, however, that the earlier cathedral was destroyed during Muslim siege in 1187 and that Negev's cathedral was simply a later reconstruction during the time of Louis IX. Holum, *Herod's Dream*, 235.

⁴² Reference to Fulcher of Chartres. Hazard, "Caesarea," 83; Quotation from William of Tyre, *A History of Deeds Done Beyond the Sea*, trans. Emily Black and A. C. Krey (New York: Columbia University Press, 1943), 437.

⁴³ Hazard, "Caesarea," 88.

Water System

Water supply was as vital to fortification technology in the arid Latin East as the fortification walls themselves. Self-sufficiency was critical to survival during a siege. The city inhabitants could count on having limited access to supplies from the outside, including water. There were three common methods for ensuring sustained supply of water in time of crisis. The first was to dig wells to fresh water inside the fortress. For this reason, military planners sought to build strongpoints at sites containing natural springs to feed these wells. Another method was to construct large vaulted cisterns beneath the ground. These were capable of storing water for extended periods, previously filled by rain runoff or fresh water from sources outside the city. The third technique, more vulnerable to disruption, was to collect water from outside sources, large open cisterns or springs, and channel it into the city.

Caesarea incorporated all three supply methods in its water system. Negev's excavation of Crusader dwellings inside the east wall found that the Crusaders had used marble column bases as wellheads, revealing the existence of fresh water wells inside the houses. CCE has excavated additional medieval wells, along with several vaulted cisterns, on the Herodian platform (Fig. 61).⁴⁴

⁴⁴ Recent excavations on the temple platform have indicated the existence of several medieval wells and cisterns. Stern, "Caesarea," 286.



Figure 61. Vaulted Cistern. (View north, Herodian platform near Cathedral of St. Peter). The Crusaders used wells and storage tanks inside the fortification to provide water in time of siege.



Figure 62. Low-Level Aqueduct. (View north, 150 meters east of the shore line). Although now filled in with sand, the low-level aqueduct had a vaulted channel 2.2 meters high. Probably constructed in the Byzantine period to provide water for agricultural use. Muslims gained access to Caesarea and conquered the city in 640 CE through this water channel.

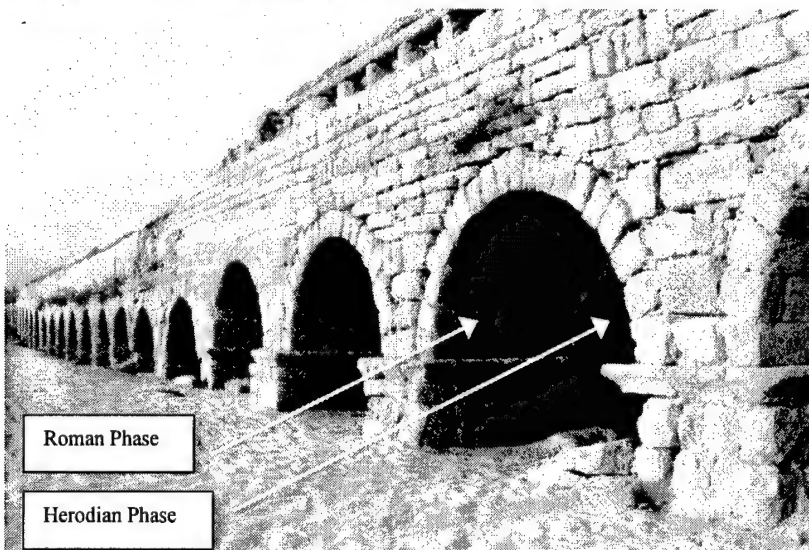


Figure 63. High-Level Aqueduct. (View north, west face). Dominating Caesarea's north shoreline, the high-level aqueduct stands 7.5 meters high. Herod built the east half of the structure. The west face is a later Roman phase dating to the time of Hadrian (second century). The Crusaders added a small masonry channel to reactivate this water source.

The twin aqueducts, running roughly parallel north of the city, were the most impressive component of Caesarea's water system. The Crusaders inherited these grand structures, as did their Islamic predecessors, from Roman and Byzantine occupation.⁴⁵ The eastern aqueduct was a vaulted, low-level channel originating from a masonry dam some five kilometers north of Caesarea (Fig. 62). The dam formed a reservoir, elevating the Zerqa River and marshes to provide sufficient gradient to accommodate Caesarea's higher elevation. The water channel measured 2.2 meters high by 1.8 meters wide. It was large enough to allow Muslim invaders to pass into Caesarea and capture the city from the Byzantines in 640.⁴⁶ The channel was capable of supplying 2,500 cubic meters of water per hour. Although there is no evidence verifying the low-level aqueduct was operational during the Crusader period, the large volume suggests the inhabitants would have used this water primarily for irrigation of agricultural lands.⁴⁷ The high-level aqueduct lies one hundred meters west of its low-level twin and stands 7.5 meters high, supported by massive stone arches (Fig. 63). A late construction modification suggests that this aqueduct was in use during the Crusader period.⁴⁸ The water flowed from springs twelve kilometers northeast of Caesarea, following carved tunnels and channels to the mouth of the aqueduct five kilometers northeast of the city. The Crusader

⁴⁵ The passing centuries witnessed several modifications and repairs on the channels and support pylons of the high level aqueduct. Herod built the first phase of the aqueduct (channel A), a complete structure supported by dressed stone arches. Hadrian built a parallel channel (B) of inferior workmanship against Herod's aqueduct, presumably to increase the flow of water. Later, channel B was filled and a new channel (C) was built on top. Yaacov Olami & Yehudah Peleg, "The Water Supply System of Caesarea Maritima," *Israel Exploration Journal* 27 (1977): 130-133.

⁴⁶ The Muslims entered Byzantine Caesarea through this aqueduct and conquered the city. A. Reifenberg, "Caesarea: A Study in the Decline of a Town," *Israel Exploration Journal* 1 (1950): 29.

⁴⁷ Olami, "Water Supply System," 135.

⁴⁸ Olami and Peleg identified their "channel C" as a Crusader addition to previous modifications on the high-level aqueduct. Channel C raised the water level 2.5 meters higher than channel B (associated with the Byzantine period). This elevation, in their view, was intended to accommodate the higher level of Crusader Caesarea. Olami, "Water Supply System," 137.

masonry channel, significantly smaller than the low-level aqueduct, transported about two hundred cubic meters of water per hour.⁴⁹

Crusader investment in Caesarea's fortification structures throughout nearly two hundred years of settlement demonstrated a concerted effort to secure the city against Muslim incursion. Despite repeated decimation following the siege battles after 1187, the Crusaders returned to fortify and occupy the city in a desperate attempt to hold conquered territory and preserve the western frontier of the Latin Kingdom. Louis IX's contribution, the remnants of which are still visible today, epitomized the ingenuity of the military engineers who studied the tactics of Muslim siege craft and adopted architectural features designed to counter those threats. Their unmitigated resolve revealed the degree to which the Franks relied on their fortifications to support their endeavors in the Latin Kingdom: "The desperate shortage of manpower encouraged every device by which stones might do the work of men."⁵⁰

⁴⁹ Olami, "Water Supply System," 133.

⁵⁰ Fedden, *Crusader Castles*, 29.

THE TIMELINE OF CRUSADER OCCUPATION AT CAESAREA

Although only one of several urban fortifications in Palestine, the two hundred-year history of Crusader Caesarea encapsulates a complete sample of the dynamics that shaped and characterized the clash between Franks and Muslims in the Latin Kingdom of Jerusalem. As one of the strategic coastal cities on the western frontier, Caesarea became one of the largest Frankish settlements and one of the four largest feudatory land holdings in the kingdom. As an economic and political center of administration, the city exceeded the status of military garrison. Caesarea served both military and non-military functions, dwarfing many of the fortifications and castles in the Levant. Yet, the city's scale was moderate in comparison to the larger population centers at Jerusalem, Ascalon, and Acre. As a case study of Latin strategy for survival in Palestine, Caesarea's history offers the advantages of studying a vital domestic infrastructure placed within the context of a military town. More than an urban center, the city always served a strategic role in the Frank's quest for military dominion in the Latin Kingdom.

Before the Crusaders set foot in the Holy Land, the Islamic powers occupied the region for over 450 years following their conquest of the Byzantine held territories in 640. Caesarea was the last of the Byzantine strongholds to fall to the Muslims, and for that reason, gained high notoriety among the Arab chroniclers for its stalwart defenses.

After taking the city, the emirs faced little military opposition with one exception. In 975, Byzantine emperor John I Tzimiskes led a military expedition through coastal Palestine to reclaim Jerusalem, capturing Caesarea in the process. However, when the Jerusalem expedition failed, the emperor returned to Byzantium and elected not to leave a garrison at Caesarea. Consequently, the city promptly returned to Fatimid Muslim rule.¹

Sparse chronicler accounts from the Muslim period, representing Arab geographers and travelers, described a reign of peace and prosperity under Moslem occupation.² In 844, one writer casually listed Caesarea as “one of the ports of Palestine.” In 897, another Arab observer described it as “a city on the shore of the sea, one of the most impregnable cities of Palestine, and the last of that land’s cities to be captured.”³ Al-Maqdisi, in 985, provided the first lengthy description, highlighting Caesarea’s agricultural abundance and the domestic security sustained by its fortification walls. Rather than referencing the aqueducts, he spoke of wells and cisterns, suggesting that the water channels were in disrepair or clogged with sand.⁴

[Caesarea is] on the coast of the Greek sea: there is no city more beautiful, nor any better filled with good things: plenty has its well-spring here, and useful products are on every hand. Its lands are excellent, and its fruits delicious; the town also is famous for its buffalo-milk and its white bread. To guard the city there is an impregnable fortress, and without lies the well-populated suburb which the fort protects. The

¹ Hazard, “Caesarea,” 79. The Fatimids were descendants of Fatima, daughter of Muhammad. They led the Shi’ite faction and opposed the ‘Abbasid Caliphate of Baghdad, establishing dynastic power in North Africa. They conquered Egypt in 969 and extended their power into Palestine and Syria. Bernard Lewis, *The Arabs in History* (New York: Harper & Row Publishers, 1966), 106-112.

² Chroniclers are Ibn-Khurdadhbih and Al-Ya’qubi, Hazard, “Caesarea,” 79.

³ In 636, Arabs defeated Byzantine forces and gained control of Syria and Palestine except the fortified cities of Jerusalem and Caesarea. Lewis, *The Arabs in History*, 53. They finally captured Caesarea in 639/640 by entering the city through the vaulted Low Level Aqueduct. Reifenberg, “Decline of a Town,” 29.

⁴ Hazard, “Caesarea,” 79.

drinking-water of the inhabitants is drawn from wells and cisterns. Its Great Mosque is very beautiful.⁵

Roughly sixty years later, a Persian traveler visited Caesarea and also commented on the city's strength and water supply. His description of 1047 implied that at least one of the aqueducts was operational:⁶ "A fine city, with running waters and palm-gardens, and orange and citron trees. Its walls are strong, and it has an iron gate. There are springs that gush out within the city; . . ."⁷ Christian pilgrimage was also part of the city's activity in the pre-Crusader period. In 1064-1065, a horde of seven thousand German pilgrims passed through Caesarea on their way to visit the Church of the Holy Sepulcher in Jerusalem.⁸ Rather than threatening these religious travelers, the Fatimid rulers catered to their needs, welcoming the trade and income generated by their visitation.⁹

Meanwhile, Jerusalem was at the center of Arab conflict in the later half of the eleventh century. In 1071, Seljuk Turks from Syria invaded Palestine and laid siege to Jerusalem.¹⁰ The Fatimid rulers lost the city in 1073 and retreated to Egypt. The Sunni Muslims treated their Shi'ite brethren with surprising clemency, allowing a Fatimid garrison to remain in Jerusalem. However, in 1089, a pro-Fatimid faction in the city rebelled. In response, the Seljuk Turks massacred three thousand Fatimid and Jewish inhabitants, sparing only the Christian citizens. Nearly ten years later, the Shi'ites

⁵ Hazard, "Caesarea," 79.

⁶ The low-level aqueduct may have been vaulted with a protective covering during this period to prevent sand clogging. Reifenberg, "Decline of a Town," 30.

⁷ Hazard, "Caesarea," 79.

⁸ Steven Runciman, "Pilgrimages," in *A History of the Crusades*, ed. Kenneth M. Setton, vol. 1 (Madison: University of Wisconsin Press, 1977), 76.

⁹ Holum, *Herod's Dream*, 217-218.

¹⁰ Seljuk Turks were recent converts to Sunni Islam, supporting the 'Abbasid caliph. 'Seljuk' is the name of the leading family among these tribes. Karen Armstrong, *Jerusalem: One City, Three Faiths*. (New York: Ballantine Books, 1997), 268.

attempted to capture Jerusalem a second time, and on this occasion they succeeded.

Caliph al-Afdal, the Fatimid leader, took the city after a six-month siege in 1098.¹¹

Islamic violence in Jerusalem captured the attention of the West. Shi'ite control of the Holy Sepulcher, accompanied by the imposing Turkish threat on the frontiers of the Byzantine empire, prompted Pope Urban II to preach a holy war of liberation at Clermont in 1095. The message of the Crusade, fueled by the religious rhetoric that cast Muslims as devils, inspired multitudes to take up the cross and journey two thousand miles on foot across the continent to reclaim the Holy City. In June 1099, less than a year following the Fatimid victory over the Turks, the Christian Crusaders encircled the hills of Jerusalem, prepared to exterminate Sunni and Shi'ite alike.¹²

May 26, 1099 marked the beginning of the Crusader timeline at Caesarea (Fig. 64). On that day, Godfrey de Bouillon stopped to camp at the marshes north of the city. He was not alone. Accompanied by a horde of twenty thousand Crusaders, comprised of princes, knights, foot soldiers, and pilgrims, Godfrey and his forces spent four days resting from their march on the road to Jerusalem.¹³ The Crusader chronicler, William of Tyre, recorded the visit.

¹¹ Armstrong, *Jerusalem*, 268-271.

¹² Armstrong, *Jerusalem*, 268-271.

¹³ Three other commanders accompanied Godfrey; Robert of Flanders, Raymond of Toulouse, and Robert of Normandy. Although the actual size of the Crusader army passing through Caesarea is uncertain, according to Godfrey, about twenty thousand warriors fought in the siege of Jerusalem. Godfrey de Bouillon et al., *Letter* (in *The First Crusade: the Chronicle of Fulcher of Chartres and Other Source Materials*, ed. Edward Peters [Philadelphia: University of Pennsylvania, 1971]), 236.

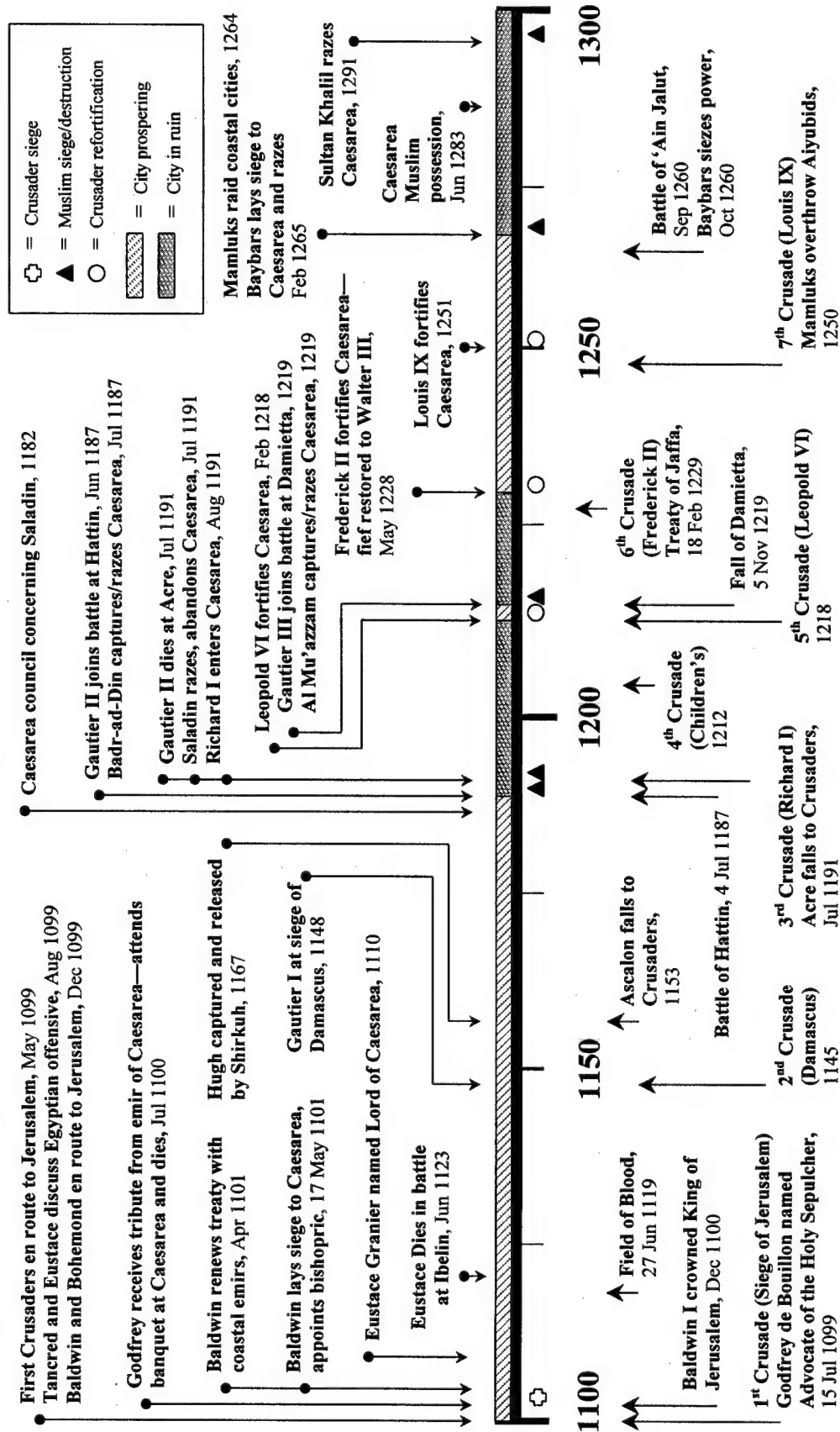


Figure 64. Crusader Caesarea Timeline, 1100-1300. Annotations above the timeline mark events pertaining to Caesarea—those below to the Latin Kingdom at large.

From Acre they marched along between Mt. Carmel and the sea, with Galilee on the left, until they came to Caesarea, the metropolis of Palestina Secunda, known of old as the Tower of Straton. Here they encamped by a river which has its source in the marshes near the city, and here, less than two miles from Caesarea, on May 28, they celebrated the holy day of Pentecost.¹⁴

The journey to Caesarea through the Muslim territories exhausted both supplies and morale. However, Fulcher of Chartres, in his account of the expedition, highlighted the brief stop at Caesarea as a welcomed, although expensive respite on the journey to the Holy City.

When we entered the interior lands of the Saracens, we were unable to obtain from the hostile inhabitants bread or anything else to eat. No one would give or sell, and as more and more of our provisions were being consumed it happened that many suffered grievously from hunger. The horses and beasts of burden suffered doubly from lack of food. They walked but had nothing to eat. . . .

Twice on the way, and no oftener, we had bread and grain, purchased at a very high price, to wit, at Tripoli and at Caesarea.¹⁵

Although the emir of Caesarea appeared to show signs of hospitality to the weary Crusader army, Fulcher remained skeptical about the Muslims' true intentions. Upon learning about the existence of creatures known as crocodiles, Fulcher reported his suspicion of Muslim maleficence in observing the presence of the "evil" beasts in the marshes near the Crusader encampment.

And there is the crocodile, an evil quadruped which is equally at home on land or in the river. It does not have a tongue, it moves the upper jaw, and its bites clamp with horrible tenacity. . . . It is armed by claws of immense size. It lives in the water at night and lies on the ground through the day. It is encased in a very tough hide.

In one stream of Caesarea in Palestine there are also quadrupeds of this type. It is said that they were brought there recently from the Nile

¹⁴ William of Tyre, *Deeds Done Beyond the Sea*, VII, 22.

¹⁵ Fulcher of Chartres. *A History of the Expedition to Jerusalem, 1095-1127*, trans. Frances Rita Ryan, ed. Harold S. Fink (Knoxville: University of Tennessee Press, 1969), I, 9, 14.

itself by malicious deceit. Hence now they often devour other animals and do much other damage in that area.¹⁶

In addition, Fulcher commented with suspicion on the Muslims' use of carrier pigeons to convey messages between the rulers of the Palestinian cities.¹⁷ Another chronicler, Raymond d'Aguiliers, referenced this unfamiliar practice in describing an incident where the ruler of Acre attempted to warn the emir of Caesarea of the Crusaders' approach.

Setting forth from Acre one day at vespers, we pitched camp by the swamps which are near Caesarea. And while, according to custom, some ran here and there below the camp, as need demanded, and while others were inquiring from acquaintances where their companions were lodged, a dove, mortally wounded by a hawk, fell down in the midst of those running about. When the Bishop of Agde took it up, he found a letter which it was carrying. And the sense of the letter was as follows:

"The King of Acre to the Duke of Caesarea: A canine breed, a foolish and troublesome host without order, passed by me. As you love your law, try by yourselves and through others to hurt them; this you can easily do, if you wish. Send this likewise to other cities and fortresses."

In the morning, when we were commanding the army to rest, the letter was shown to the princes and to all the people, and (it was manifest) how God had been kind to us, so that not even the birds could cross through the air to harm us, and that He likewise disclosed to us the secrets of our foes.¹⁸

Following the capture of Jerusalem on July 15, 1099, Godfrey, the chosen Frankish ruler, accepted the title as Advocate of the Holy Sepulcher and immediately set out to secure the Palestinian coast. In the next few weeks, Tancred, prince of Galilee, and Eustace, Godfrey's brother, met at Caesarea to discuss the threat of a Muslim counteroffensive based from the Fatimid-held port at Ascalon. On August 12, the

¹⁶ Fulcher of Chartres, *Expedition to Jerusalem*, XLIX, 3-4.

¹⁷ Fulcher of Chartres, *Expedition to Jerusalem*, XLVII.

¹⁸ Raymond d'Aguiliers, *The March to Jerusalem* (in *The First Crusade: the Chronicle of Fulcher of Chartres and Other Source Materials*, ed. Edward Peters [Philadelphia: University of Pennsylvania, 1971]), 200.

Franks won a decisive battle against the Egyptians on the plains near Ascalon and won control of the northern Judaeen plain. Following this encouraging victory, Baldwin, Count of Edessa and Godfrey's second brother, arrived in Palestine, passing through Caesarea on his way to Jerusalem to fulfill belated crusading vows. Bohemond, the prince from Antioch and Tancred's uncle, accompanied Baldwin for the same purpose.¹⁹

Early in 1100, the emirs of the Muslim coastal cities, including Caesarea, sought to make peace with Godfrey. The ruler of Jerusalem accepted their gifts and established treaties promising security from Frankish attack for a monthly tribute of five thousand gold bezants. In July, Godfrey toured Caesarea where the emir hosted a banquet in his honor. However, shortly after the feast, Godfrey became ill and died.²⁰ The Franks immediately suspected the Saracens of treachery, accusing the emir of lacing Godfrey's food with poison.

In December 1100, Baldwin I, Godfrey's brother, donned the crown and became the first official king of Jerusalem. Baldwin passed through Caesarea on the way to his coronation, and Fulcher of Chartres records that the emirs of the coastal cities sent boats of food to Baldwin on a daily basis, "a gesture born more from fear than from love. . . . They feigned friendship but had none at heart."²¹

In March 1101, Baldwin renewed the tributary treaties with the emirs, but only to conceal his plans for conquering the Palestinian coast. His objective was to punish the Muslim rulers for his brother's death and secure additional ports for trade and supply

¹⁹Hazard, "Caesarea," 81; Benvenisti, *Crusaders in the Holy Land*, 115.

²⁰ According to Muslim sources, Godfrey died from arrow shot while laying siege to Acre. Ibn al-Athir, *X*, 222 (in *Arab Historians of the Crusades*, ed. Francesco Gabrielli, [Berkeley: University of California, 1984]), 13, n. 1.

²¹ Fulcher of Chartres, *Expedition to Jerusalem*, II, III, 8-9.

from the West. Contracting with the Genoese for naval assistance, Baldwin launched attacks in April against the fortress at Arsuf which surrendered without a fight. A delegation from Caesarea protested Baldwin's treaty violations, and in response, Baldwin graciously offered to allow Caesarea's ruler to surrender unconditionally. Upon the emir's refusal, Baldwin laid siege to Caesarea May 2, 1101.

Fulcher of Chartres and William of Tyre both recorded vivid accounts of the siege and capture of Caesarea. Baldwin's army, in association with the Genoese fleet commanded by William Embriaco, surrounded and blockaded the fortification by land and sea. The Frankish-Italian alliance supplied the vital manpower and resources Baldwin required for his coastal campaign. The Genoese contingent alone numbered eight thousand men. Assessing the strength of Caesarea's fortification walls, Baldwin realized he had to sacrifice a few of the Italian ships to provide building materials for "petrariae" (catapults) and other siege equipment.

... Because the wall was very strong the city could not be taken quickly.

Therefore he [Baldwin] ordered *petrariae* to be made and also a very high wooden tower to be constructed from the masts and oars of ships. Our carpenters made the tower twenty cubits higher, I estimate, than the wall. The purpose was to enable our soldiers, when the tower should have been brought up to the wall, to bombard the enemy with stones and arrows.²²

While work continued on the siege tower, Baldwin's army employed the newly constructed catapults to launch enormous rocks against the walls of Caesarea. The bombardment continued non-stop for two weeks, an operation designed to induce surrender through psychological terror and fatigue.

²² Fulcher of Chartres, *Expedition to Jerusalem*, II, IX, 1; William Embriaco, a Genoese consul. Hazard, "Caesarea," 82.

... [The Franks] set up hurling engines in strategic positions and made a violent assault on the place. Frequent skirmishes round the gates struck fear to the hearts of the townspeople; huge rocks hurled without intermission from the machines weakened the walls and towers and even shattered the houses, so that not a moment of rest was granted the besieged.²³

After fifteen days of “violent and unceasing” siege work, Baldwin’s men “chafed against further delay” as they burned with righteous zeal and fury against the willful defiance of their Muslim foes. Although the siege tower was not yet complete, the Crusaders sensed their bombardment campaign was succeeding in weakening both the upper defenses of the walls and the will of the Muslims to resist.

The Christians knew, however, that the citizens were unequal to such severe labors, for they had been rendered soft and effeminate through long-continued leisure and peace and were wholly without experience in the practice of arms. From day to day it was noticeable that, wearied by the burden of war, they were offering a less strenuous resistance.²⁴

Suddenly, in a rousing, vocal outburst of rage, Baldwin’s men, led by the Genoese sailors, abandoned the unfinished siege tower and “stormed the city with shield and spear.” Many used ladders to scale the walls, mount the ramparts, and seize the fortification towers. Fulcher heralded the Crusaders’ uncanny ability to scale the walls as a clear sign of God’s favor. Others assaulted the iron gates and forced the defenders to their fallback position behind a secondary wall. The breach signaled the doom of the inhabitants, opening the way for the king and his entourage of bloodthirsty troops to pour into the streets of Caesarea in a flood of violent fury. The chroniclers preserved the horror of this assault in graphic detail.

The Saracens defended themselves as stoutly as they could, encouraging each other. However, the Franks, whose Lord was God,

²³ William of Tyre, *Deeds Beyond the Sea*, X, 15.

²⁴ William of Tyre, *Deeds Beyond the Sea*, X, 15.

quickly erected ladders, which they had prepared for this purpose, and ascended to the top of the wall. Then they slew with their swords everyone whom they encountered.

The Saracens, seeing that our men were so fierce and that the city was already taken by them, fled precipitately to wherever they thought they might preserve their lives a little longer. But they were unable to hide anywhere and instead were slain in a death that was well deserved."²⁵

Armed soldiers were now roving freely about everywhere. They broke into houses where the citizens had vainly thought to find protection. They killed the fathers of families, seized utensils of every kind, and laid violent hands on all that seemed desirable, together with the very houses. . . . It is needless to speak of the fate of those who happened to encounter our forces in the streets and squares of the city, for even those who carefully sought out hiding places in the byways were unable to avoid death.²⁶

The Franks showed no mercy, especially when they discovered the inhabitants were attempting to conceal their coins and jewels. The Crusaders viewed these spoils of war as earned payment for their siege labor. The fact the Muslims were literally swallowing their hard earned salary only further inflamed Franks' barbarism. They resorted to opening the bowels of their victims and burning corpses in an effort to find the hidden valuables.

Many who perchance might otherwise have been granted life brought death upon themselves. They swallowed gold pieces and precious gems. This roused the cupidity of the Christians to such a degree that they clove their victims through the middle in search of treasures that might be hidden in their very vitals.²⁷

I saw a great many of the Saracens who were killed there put in a pile and burned. The fetid odor of their bodies bothered us greatly. These wretches were burned for the sake of finding the bezants which some had swallowed and others had hidden in their mouths next to the gums, not wishing the Franks to get anything that belonged to them.

Hence it sometimes happened when one of our men struck the neck of some Saracen with his fist that from ten to sixteen bezants would be ejected from the mouth. The women also shamelessly hid bezants within

²⁵ Fulcher of Chartres, *Expedition to Jerusalem*, IX, 4-5.

²⁶ William of Tyre, *Deeds Beyond the Sea*, X, 15.

²⁷ William of Tyre, *Deeds Beyond the Sea*, X, 15.

themselves in a way that was wicked and which is more shameful for me to tell.²⁸

The most desperate scene of the assault took place at the Great Mosque on the Herodian platform. The majority of the inhabitants fled there to find sanctuary and plead for mercy, hoping the sacred site might quell the Crusader's fury. Baldwin spared the emir and the qadi (religious leader), as well as some of the richer merchants, for ransom.²⁹ In addition, the Franks set aside the women for themselves, "the comely and the ugly," since "they could always be used to turn the hand mills."³⁰ However, after these exceptions, Baldwin's men displayed no regard for the Muslim house of prayer and its panic-stricken inhabitants.

Into this place the Christians forced their way. There followed such a terrible massacre of the refugees that the feet of the destroyers were stained with the blood of the slain, and the very sight of the multitude of corpses inspired horror. . . .

Practically the entire adult population of the city was slain in one place or another. Only the young boys and girls were spared. Here in truth might be seen literally fulfilled that which is written in the prophets: the Lord "delivered his strength into captivity and his glory into the enemy's hand."³¹

Following the bloody massacre, Baldwin's men turned to the more tedious business of dividing the booty with the Genoese. The great pile of spices, gold, and jewels made every Frank rich and sent each of the eight thousand sailors home with forty-eight shillings and two pounds of pepper. Although entitled to a large sum of money, the Genoese forfeited their cash reward in exchange for one of the city's prized possessions. In their looting of the Great Mosque, they discovered what they believed to

²⁸ Fulcher of Chartres, *Expedition to Jerusalem*, II, IX, 9.

²⁹ Hazard, "Caesarea," 82.

³⁰ Fulcher of Chartres, *Expedition to Jerusalem*, II, IX, 6.

³¹ William of Tyre, *Deeds Beyond the Sea*, X, 16. William's Old Testament quote is Psalm 78:61.

be the Holy Grail, an exquisite hexagonal-cut, emerald chalice.³² In addition, as part of their contract with Baldwin, the Genoese gained title to a third of the city, along with tax-free harbor and trading rights.

Thus, the Franks possessed Caesarea, a city emptied of its former inhabitants, its walls and structures more or less preserved. The harbor was apparently unusable at the time since William of Tyre reported that the city did not have a port. However, William did comment on the “running streams and watered gardens,” an indication the aqueducts were functioning.³³ The Franks cleaned up and ritually purified the Great Mosque, renaming it the Cathedral of St. Peter. This spiritual ceremony forcefully symbolized the Crusader conquest. The very same building, five hundred years prior, had served as a Byzantine church before the Muslim invasion. Realizing the city’s significant Christian heritage, Baldwin made Caesarea an archbishopric, and “a certain Baldwin [not the king] who had come on the expedition with Duke Godfrey was chosen archbishop of the city.”³⁴ This first archbishop of Caesarea demonstrated greater political talents than spiritual qualities. Bishop Baldwin, in an effort to raise crusading revenues, created a scandal when he branded his forehead with a cross and attempted to pass it off as a miraculous angelic sign.³⁵

From its beginnings in 1101, Caesarea prospered under Crusader rule over a

³² Hazard, *Caesarea*, 83. The Franks gave the Genoese a third of the spoils, along with the “emerald” Grail. William of Tyre, *Deeds Beyond the Sea*, 437. The chalice, made of green glass, remains on display at the San Lorenzo Cathedral in Genoa. Holum, *Herod’s Dream*, 220.

³³ William of Tyre states the city “is without a port” and incorrectly comments that “Herod, at great expense and effort, endeavored without success to construct a harbor there...” Herod’s port was actually quite successful, but later fell into disrepair. William of Tyre, *Deeds Beyond the Sea*, X, 15. Reifenberg’s study confirms the aqueducts were operational throughout the crusader period. Reifenberg, *Decline of a Town*, 30.

³⁴ William of Tyre, *Deeds Beyond the Sea*, X, 16.

³⁵ Riley-Smith, *The Crusades: A Short History* (London: Yale University Press, 1987), 47.

period of eighty-six years. These early decades reflected the progress of the Latin Kingdom during a time of relative stability blessed by Arab disunity. King Baldwin, in accordance with his feudal system of administration, granted Caesarea and its surrounding lands and villages to Eustace Granier, Godfrey's brother, as a hereditary fief in 1110. Caesarea's feudal lands covered five hundred square miles with boundaries fifteen miles north and east of the city and twenty miles south. Palestinian Arabs served as peasants on the fief, supporting the knights and nobles of the city through crop and cash payments. The primary threat during this period was from Muslim raiders, and the peasants, having little security outside the city walls, depended on the knights for protection.

Other military concerns focused on the foreign campaigning interests of Jerusalem. Caesarea was responsible for providing the king with twenty-five knights and twenty-five mounted sergeants. Eustace Granier, Caesarea's first lord, also served as regent while King Baldwin II was held captive by Balak of Aleppo. During this period of federal service, Eustace died in battle leading the Crusader army at Ibelin in June 1123. Eustace's successor, Gautier I, also spent time serving the crown. In 1148, he participated in the siege of Damascus in support of the Second Crusade. Gautier's leaden seal demonstrated his concept of Caesarea's military significance during this period, showing a mounted knight on one side, and a fortification tower on the other (Fig. 16, chapter 2). The pattern of military involvement in support of the Kingdom of Jerusalem continued. Hugh, the next lord of Caesarea, accompanied Baldwin III and his successors, Melisende and Amalric, on a total of nineteen military expeditions. In 1167, Hugh served as ambassador for Amalric in Egypt where he alienated the Fatimid

diplomatic court, insisting the caliph remove his glove before shaking hands and ratifying the treaty between the two states. In the campaign that followed this diplomatic blunder, Hugh and his knights attacked the division of the Fatimid army led by Shirkuh's nephew, Saladin. No match for Saladin's forces, Hugh's men deserted and Shirkuh, the vizir of Egypt, took Hugh prisoner. When the rest of the Frankish army finally succeeded in taking Cairo, Shirkuh decided to negotiate a peace agreement with his prisoner. Addressing Hugh of Caesarea, Shirkuh stated,

You are a great prince of high rank and much influence among your own people, nor is there any one of your barons to whom, if free choice was offered me, I would prefer to communicate this secret of mine and make my confidant. . . . You are a man of high rank, as I have said, dear to the king and influential both in word and deed: be the mediator of peace between us.³⁶

Although Hugh's report of the incident, as recounted by William of Tyre, may have favored the Frankish lord, the evidence suggests that Hugh of Caesarea had the strength of character to win the respect of Franks and Saracens alike.³⁷

The year 1187 marked a decisive turning point in Caesarea's history. Following Nur ad-Din's death in 1174, Saladin threatened the security of the Latin Kingdom through his efforts to gain control of Syria and unify the Seljuks and Fatimids against the Christians. In 1182, a strategy council met at Caesarea to discuss how to counter this rising concern. Five years later, Gautier II, Caesarea's sixth lord, took his garrison of over one hundred men to join the combined Frankish army west of the Sea of Galilee to face Saladin at the Horns of Hattin. Saladin's overwhelming victory on July 4, 1187 left the Palestinian cities open to attack. While Saladin marched on to capture Jerusalem, he

³⁶ William of Tyre, *Deeds Beyond the Sea*, IXX, 29.

³⁷ LaMonte, "Lords of Caesarea," 145-150; Hazard, "Caesarea" 84-85.

sent his emirs to seize the coastal cities. In mid-July, Badr-ad-Din captured Caesarea with little effort; following Hattin, the Crusader army was ill equipped to block the Muslim advance. The Muslim force followed the pattern established by the Crusaders eighty-six years before, looting the treasuries, destroying the cathedral, and massacring most of the inhabitants, leaving the city barren and desolate. The destruction was universal. Within a year, the Franks lost all their possessions in the Latin Kingdom except Tyre.³⁸

The fall of Jerusalem to Saladin in October 1187 shocked Western Europe and prompted thousands of knights and commoners to join the Third Crusade. Richard I, the Lionheart, landed his forces in Palestine in 1191 and bolstered the Franks' ongoing siege of Acre. Gautier II, who had fought against Saladin at the Horns of Hattin, assisted Richard in capturing Acre. However, in July, Gautier fell the course of the battle. Following the fall of Acre to the Crusaders, Saladin hurriedly razed and abandoned many of the Palestinian fortifications, including Caesarea, to deny their use to Richard's army. In close pursuit, Richard passed through Caesarea at the end of August and received supplies from the fleet at the harbor. The Franks quickly headed south for Arsuf where they met up with Saladin and inflicted heavy losses on his army. This Crusader victory led to the signing of the Treaty of Ramla in 1192 which reestablished the Franks' foothold in the Levant. However, Jerusalem itself remained under Muslim control. In addition, the wake of Saladin's destruction left Caesarea abandoned and unfortified for the next twenty-seven years.³⁹

³⁸ Hazard, *Caesarea*, 85; Benvenisti, *Crusaders in the Holy Land*, 6-7.

³⁹ Hazard, *Caesarea*, 86; Benvenisti, *Crusaders in the Holy Land*, 7.

During the prelude to the Fifth Crusade in December 1217, while waiting for the main body of Crusaders to arrive, Duke Leopold VI of Austria and John of Brienne, king of Jerusalem, started refortifying Caesarea. The Hospitallers also contributed to the work, while their Teutonic and Templar brethren engaged in similar projects to the north at Château Pèlerin. They completed preliminary work on February 2, 1218 with a celebratory mass in the Cathedral of St. Peter. The strategy of the Fifth Crusade took the Franks to Egypt, and Gautier III of Caesarea joined the battle at Damietta in 1219.⁴⁰ This proved to be an inopportune time for Gautier to be away from home. King John had refused to give Gautier title to Caesarea until he reimbursed the royal treasury for the cost of the improvements. Since Gautier was in Egypt and unable to make the payment, John's regent ceded Caesarea to the Genoese in return for their promise to insure its defense. Meanwhile, initial Crusader victories in Egypt prompted the Aiyubid ruler, Al-Mu'azzam, to leave the Nile Delta and return to Syria.⁴¹ On his journey through Palestine, Al-Mu'azzam unexpectedly attacked Caesarea. The Genoese held out for only four days and then used their ships to slip out during the night. The Syrian ruler, seeking only to reduce the fortifications, left Caesarea in ruins much as his uncle Saladin had done. The city remained dormant for another nine years.⁴²

Late in 1227, the first members of the Sixth Crusade arrived at Caesarea. Much like their predecessors in the Fifth Crusade, the new German arrivals decided to refortify

⁴⁰ Jerusalem remained in Muslim hands after the conclusion of the Third Crusade in 1192. The Fourth Crusade never reached Palestine—the commercial interests of Venice diverted the crusaders to conquer Constantinople instead. The strategy of the Fifth Crusade was first to conquer and establish Egypt as a base in order to launch an attack on Jerusalem. Benvenisti, *Crusaders in the Holy Land*, 7-8.

⁴¹ The Aiyubids were Saladin's successors following the collapse of his united Syro-Egyptian state after his death in 1192. Lewis, *Arabs in History*, 153. Al-Mu'azzam was the brother of the Egyptian sultan al-Kamil. Hazard, "Caesarea," 87.

⁴² Hazard, "Caesarea," 87.

the city while waiting for their excommunicated leader, Frederick II, to arrive from Italy.⁴³

At length . . . all unanimously agreed to march to the holy city, which Jesus Christ consecrated with his own blood; and that the approach might be more easy, it was unanimously determined to fortify in the first place Caesarea, . . .

. . . About ten thousand foot soldiers assembled from different parts of the world; and all of these, inspired with a common feeling of devotion, marched to Caesarea, and had garrisoned some castles there, . . .⁴⁴

The building project began in May 1228 and continued through Frederick's belated arrival in September. Apart from bloodshed, and in accordance with his less than enthusiastic zeal for crusading, Frederick pursued a diplomatic solution with the Egyptian sultan, al-Kamil. The Treaty of Jaffa, signed February 18, 1229, recognized Caesarea and most of Palestine, including Jerusalem, as Frankish possessions.⁴⁵ Gautier III, after losing his fief in the last crusade, finally gained title to Caesarea as the city's eighth lord. Ironically, he reigned only a short four months before he fell in battle, fighting on behalf of Frederick at Cyprus.⁴⁶

Caesarea experienced a second period of prosperity over the next thirty-seven years, from the negotiated peace of Frederick II through the aftermath of the Seventh Crusade. The Hospitallers took advantage of the relative calm to increase their holdings, purchasing and improving sections of the city and its surrounding fief. The highlight of the restoration effort, however, came with the arrival of the French king, Louis IX.

⁴³ Pope Gregory IX excommunicated the Roman emperor, Frederick II, for a timely illness delaying his participation in the Sixth Crusade. Frederick claimed the crown of Jerusalem in Brindisi after marrying Yolanda, daughter of King John of Brienne. Riley-Smith, *The Crusades*, 150.

⁴⁴ Roger of Wendover, *The Crusade of Frederick II* (in *Christian Society and the Crusades, 1198-1229*, ed. Edward Peters [Philadelphia: University of Pennsylvania, 1996], 149, 151.

⁴⁵ The Muslims retained the Temple Mount in Jerusalem.

⁴⁶ Hazard, "Caesarea," 87; Benvenisti, *Crusaders in the Holy Land*, 8.

Louis IX, esteemed to be a "true saint" by his loyal vassal and biographer Jean, Lord of Joinville, lay on his deathbed in Paris, 1244. Louis had just learned of the fall of Jerusalem to the Muslims, a tragedy which ended fifteen years of peace following the treaty of Frederick II.⁴⁷ According to Joinville, the news disturbed the king to such an extent that he vowed to go on crusade and rescue the Holy City if God renewed his strength.

... One of the two ladies who were tending him wanted to draw the sheet over his face, maintaining that he was dead. But another lady, who was on the opposite side of his bed, would not allow it, and said she was sure his soul was still in his body.

As the king lay listening to the dispute between the two ladies our Lord worked within him, and quickly brought him back to such a state of health that although up till then he had not been able to utter a word he now recovered his speech. As soon as he was able to speak he asked for the cross to be given him; and this was promptly done.⁴⁸

Louis launched the Seventh Crusade in 1248. Accompanied by approximately 2,500 knights, the king sailed to Cyprus where he joined forces with additional troops from the Latin Kingdom. The strategy was to remedy the failures of the Fifth Crusade and invade Egypt in order to provide a base for operations in Palestine. In May 1249, Louis led his forces in a successful siege against Damietta in the Nile Delta. However, continued operations in the Egyptian interior met with disaster. At Mansura, the Muslims managed to trap the advance guard led by the king's brother, Robert of Artois. They also secured positions on the lower Nile behind the Crusader army, isolating

⁴⁷ During the 1240's, the approach of Jenghiz Khan and his Mongolian army drove the Hwarizmian tribe into a military alliance with the Egyptian sultan. The Franks were allies with the Sultan of Damascus, Egypt's mortal enemy. As an act of aggression against the Damascene-Frankish alliance, the Egyptian backed Hwarizmians took Jerusalem in 1244. Benvenisti, *Crusaders in the Holy Land*, 9.

⁴⁸ Taking the cross was a symbolic gesture representing the vow to go on crusade. Joinville, *The Life of St. Louis* (in Joinville and Villehardouin: *Chronicles of the Crusades*, trans. M. R. B. Shaw [London: Penguin Books, 1963]), 191.

Louis' forces and blocking his escape route back to Damietta. Weary from disease and lack of supplies, the Crusaders fell captive to the Egyptian army in April 1250. Louis himself was held prisoner for a month and ransomed for release.⁴⁹

Following the tragedy of the Seventh Crusade, Louis regrouped his remaining forces in Palestine. While waiting to secure a treaty with the Egyptian sultan for the release of his troops still in captivity, Louis was determined to make up for his military failure and defend the Latin Kingdom against possible Muslim offensives. In March 1251, he initiated a massive effort to refortify Caesarea and the other coastal cities.⁵⁰

At the beginning of Lent the king made ready, with all the forces he had, to go and fortify Caesarea, a town some forty leagues from Acre on the way to Jerusalem, which the Saracens had destroyed. . . . I cannot say how it happened, unless it was by God's will, but the Saracens did no harm to us during the whole of that year.⁵¹

Louis' undertakings at all of the coastal sites were comprehensive efforts, involving major modifications and redesign of older structures. These projects required massive expenditures and great investment of manpower. As Joinville reported on the work at Jaffa,

The king immediately began to build new fortifications all around the old castle and stretching to left and right as far as the sea. . . .

I will not attempt to give you an accurate account of the huge sums the king spent in fortifying Jaffa, for they are too great to be reckoned. He fortified the town right down to the sea on both sides; there were twenty-four towers along the walls, and the moats were clear of mud both inside and outside. . . .

To give you some idea of what the king spent on all this I will tell you that I asked the legate how much the gate and part of the wall had cost him. He asked me how much I thought, and I estimated that the gate must have cost a good five hundred *livres* and his part of the wall three

⁴⁹ Riley-Smith, *The Crusades*, 159-161.

⁵⁰ Riley-Smith, *The Crusades*, 161. Before Caesarea, Louis fortified Acre. He later accomplished similar work at Jaffa and Sidon.

⁵¹ Joinville, *Life of St. Louis*, 282.

hundred. He told me—as God is my witness—that wall and gate together had cost him full thirty thousand *livres*.⁵²

At Caesarea, archaeological remains indicate that Louis built curtain walls with sloping glacis and sixteen projecting towers around the entire perimeter of the city. He also designed defensive gatehouses for the north and east entrances and rebuilt the citadel using granite columns. In contrast to previous Frankish leaders, it is likely that Louis himself labored on Caesarea's fortification out of religious piety. As Joinville stated, "I often saw his Majesty carrying a hod full of earth to the trenches so as to gain the promised indulgence."⁵³ After a year, Louis completed his work at Caesarea in spring 1252.⁵⁴ Joinville summarized the French king's contributions by recording the final address of the Latin Kingdom's patriarch and barons prior to Louis' departure.

Your Majesty, you have fortified the city of Saida [Sidon], the city of Caesarea, and the town of Jaffa, all of which is of very great advantage to the Holy Land. You have also greatly strengthened the defences of Acre by the walls and towers you have built around it. . . . we do not see how it will profit the kingdom of Jerusalem for you to remain here any longer.⁵⁵

Crusader refortification in Palestine after 1250 stemmed from the awareness of a growing international threat. In Egypt, the aggressive Mamluks had overthrown their Aiyubid rulers.⁵⁶ In addition, the Mongol ruler of Persia had captured Damascus and was planning to advance on Egypt. The citizens of the Latin Kingdom of Jerusalem realized they were in the middle of an inevitable collision between the two great hostile

⁵² Joinville records that a good horse and armor were valued at eight hundred livres. Joinville, *Life of St. Louis*, 273, 295, 305.

⁵³ Report on Louis' work at Jaffa immediately following refortification at Caesarea. Joinville, *Life of St. Louis*, 295.

⁵⁴ Present day remains of crusader walls and citadel were Louis' construction. Hazard, "Caesarea," 88.

⁵⁵ Joinville, *Life of St. Louis*, 318.

⁵⁶ Mamluk means "slave." They were a class of specially trained slave-soldiers in Egypt, most likely Kipchak Turks from southern Russia. Riley-Smith, *The Crusades*, 200.

powers. Electing to ignore the conflict, they allowed the Egyptian sultan, Kutuz, to lead his forces unhindered through Palestine to fight the Mongols at 'Ain Jalut in September 1260. Following a decisive Egyptian victory, Baybars, chief general of the army, murdered the sultan and usurped the Egyptian throne. Within three months, Baybars seized Damascus and Syria and reunified the Muslim coalition. With the Mongol distraction eliminated, the Mamluks now turned their attention to Palestine.⁵⁷

During the summer of 1264, Baybars raided the coastal plains, plundering the fiefs and taking prisoners. His attack caught the Crusaders by surprise. According to one chronicler, the sultan "told no one of his intention and nobody knew where his proposed objective lay."⁵⁸ Instead, Baybars planned his assault in secret, inviting the local emirs to join his forces to "hunt in the forest of Arsuf [since] the forest was full of lions." Baybars indeed assembled his forces in the woods where "he tested out his swords . . . and arranged death for his enemies, though this was pre-ordained for them."⁵⁹ He then sent reconnaissance parties to inspect the fortifications at Arsuf and Caesarea. Based on reports that Caesarea was "a strong and well-fortified place," Baybars took advantage of his forest encampment to construct large siege engines.

On the morning of the second day, he himself went out and sat by the workmen so that they should work their hardest, and on that day four great mangonels were constructed as well as other small ones. The Sultan sent letters to his fortresses asking for mangonels, workmen and masons, and he ordered the soldiers to make ladders, . . . towards morning he mounted and rode off in the direction of Caesarea, . . .⁶⁰

⁵⁷ Benvenisti, *Crusaders in the Holy Land*, 9; Hazard, "Caesarea," 88; Riley-Smith, *The Crusades*, 201.

⁵⁸ Ibn al-Furat, *Tarikh al-Duwal wa'l-Muluk* (in *Ayyubids, Mamlukes and Crusaders*, trans. U. and M. C. Lyons [Cambridge: W. Heffer and Sons, 1971], 68.

⁵⁹ Ibn al-Furat, *Tarikh al-Duwal wa'l-Muluk*, 69.

⁶⁰ Ibn al-Furat, *Tarikh al-Duwal wa'l-Muluk*, 69. Mangonels, like *petreries* and *trebuchets*, were siege engines designed to launch missiles (generally large stones) against a fortification. Unlike the trebuchet (swing-beam catapult), the mangonel and petrery worked on a torsion principle, using twisted ropes and cords to produce a spring like force to propel projectiles. Rogers, *Warfare in the Latin East*, 213.

On Thursday, February 27, 1265, Baybars brought the Mamluk army to Caesarea with full siege equipment.⁶¹ He encircled the city and attacked it, using both the element of surprise and the sheer mass of his forces to overwhelm the fortification. The Muslim soldiers, equipped with iron horse pegs, tethers and halters, ran to the counterscarp and threw themselves into the moat. They used their equipment to climb the glacis and scale the curtain walls on all sides, flying their banners upon reaching the ramparts. The soldiers then captured the projecting towers and gatehouses. They tore away the iron gates and burned the wooden doors while the inhabitants fled to the citadel in the harbor. At this point, Baybars sent letters with the good news of Caesarea's capture to the emirs in the surrounding regions. He also moved his mangonels up to the Herodian platform to position them for assault against the citadel.

The siege against the harbor fortress was the fateful climax in Crusader Caesarea's two hundred-year history. The following account provided by the Muslim chronicler, Ibn al-Furat, vividly portrayed the Crusaders' last stand in 1265.

This citadel, known as al-Khadra (the Green), was one of the most strongly fortified and finest of its kind. For Louis . . . had had granite pillars carried there which he had arranged with skill. No finer construction was to be seen . . . nor any stronger or loftier, for round it was the sea whose water flowed in its moats. It could not be mined because of the granite columns used crosswise in its construction, and even were it undermined it would not fall. However, the Muslims continued to attack it, bombarding it with their mangonels. At one moment the Sultan would be shooting arrows from the top of a church in front of the citadel, at another, he would mount and plunge into the sea

⁶¹ The Muslims considered Thursday to be a sacred day when God's favor would bless their military endeavors. The chronicler Ibn al-Furat made the case that Caesarea fell to the Muslims so easily because the attack happened on a Thursday. "It is reported of the Prophet... that he would never set off on a journey except on a Thursday... for it is on Thursdays that affairs are presented to God, Glorious and Almighty." Ibn al-Furat, *Tarikh al-Duwal wa'l-Muluk*, 77.

waves to fight.⁶² Siege engines and moving towers were constructed and an issue of arrows from the citadel of 'Ajlun was made to the troops . . . The Sultan ordered wood and mangonel stones to be brought, and he gave robes of honour to the emir . . . for the work that he had done on the mangonels and to their crews. . . .

The Sultan remained steadfastly at the front of the fighting. . . . in the church with a company of crossbowmen, shooting away and preventing the Franks from climbing to the top of the citadel. At times he would go on one of the siege engines fitted with wheels, being drawn along beneath it up to the walls where he could see the saps for himself. One day, he fought with a shield in his hand and by the time he returned, there were a number of arrows stuck in it.⁶³

The siege against the citadel lasted nearly one week. Although the sea moat and granite column construction of the fortress prevented mining, the constant barrage of stones, arrows, and Greek Fire launched from the top of the Herodian platform eventually weakened the "impregnable" fortress. On the night of Thursday, March 5, the besieged Crusaders agreed to surrender the citadel along with its contents in exchange for their lives.⁶⁴ Baybars mercifully allowed the weary defenders to leave peacefully while his soldiers rushed into the fortress.⁶⁵ "The Muslims climbed up to it from the walls, burned its gates and entered it from above and below, while the call to morning prayer was made from its top. The Sultan went up to it and then shared out the city between his emirs."⁶⁶

Immediately following the victory and weeklong conquest of Caesarea, Baybars spent two weeks razing the fortifications to prevent their future use. Ironically, in the

⁶² "...church in front of the citadel..." Riley-Smith speculates this probably refers to the Cathedral of St. Peter on the Herodian platform or perhaps another unknown church located closer to the citadel. Ibn al-Furat, *Tarikh al-Duwal wa'l-Muluk*, 206.

⁶³ Ibn al-Furat, *Tarikh al-Duwal wa'l-Muluk*, 70-71.

⁶⁴ Ibn al-Furat notes that like the city of Caesarea itself, the citadel fell to the Muslims on a Thursday, a sign of God's favor. Thursday was regarded as a sacred day. Ibn al-Furat, *Tarikh al-Duwal wa'l-Muluk*, 77.

⁶⁵ Hazard, "Caesarea," 88.

⁶⁶ Ibn al-Furat, *Tarikh al-Duwal wa'l-Muluk*, 71.

same way Louis IX had personally built Caesarea's fortifications for God in 1251, Baybars now destroyed them for Allah in 1265. According to the chronicler, "he dismounted and, taking a pick-axe in his hand, he started on this work himself. Seeing him, the Muslims imitated him, setting to work themselves, while he took part in this himself with his own hands, getting a coating of dust."⁶⁷

The Muslims celebrated the fall of Caesarea as a sign of God's favor. After ensuring the complete destruction of the fortification, Baybars divided the former fief among his emirs and officials.⁶⁸ The certificate granting ownership of parceled lands included theological statements revealing the significance of captured fortifications from the Muslim perspective.

Praise be to God for the unbroken chain of His aid . . . praise be to Him for his conquest; when men saw how advantageously it occurred and the greatness of its effect, they realised that it is for some purpose that the ruler has been granted this rule. . . . The best favour is that which follows despair, coming after a period when kings have been feeble and the people negligent.⁶⁹ How excellent a favour it was to the religion of Muhammad which brought it unity, opening the doors to conquest when the two enemies, Frank and Tartar, were routed; . . . It was a favour which caused the armies of Islam to bring about the humiliation of the Franks by going to fight them in the heart of their lands, passing their strongholds and going through their provinces and settlements; . . . Some of these armies snatch Frankish castles and destroy fortresses; . . . some, . . . take over towering citadels and scale high mountains. . . . When God grants him [Sultan Baybars] the capture of citadels, he destroys the walls, giving the blood to the sharp swords, the necks to the chains of captivity, and the cultivated lands to his friends and helpers."⁷⁰

⁶⁷ "...coating of dust..." figurative language referring to a Muslim blessing promising that "if the feet of one of God's servants are covered with dust in His [God's] path, the Fire [of Hell] will not brand him." Ibn al-Furat, *Tarikh al-Duwal wa'l-Muluk*, 71.

⁶⁸ Archaeological evidence clarifies the extent of Baybars' destruction. Although he seems to have reduced the curtain walls and the citadel, he left the glacis, moats, and counterscarps nearly in tact.

⁶⁹ "...after a period when kings have been feeble..." Riley-Smith notes this refers to the later Ayyubids.

⁷⁰ Ibn al-Furat, *Tarikh al-Duwal wa'l-Muluk*, 78-79.

The final chapter in the history of Caesarea confirmed its permanent demise. The Kingdom of Jerusalem, having no central leadership after Louis IX's departure in 1254, hopelessly divided into rival factions. The Hospitallers, along with the other Military Orders, had grown powerful enough to begin making their own treaties with the Mamluks. Hugh of Antioch-Lusignan tried to establish his rule on the throne of Jerusalem in 1269. However, he faced continual insubordination from the Templars and rejection by the papacy, leading him to deem the kingdom ungovernable upon his departure in 1276. Although Charles of Anjou legally acquired title to the throne, the viability of the kingdom further degenerated through continued political infighting.⁷¹ On May 22, 1272, the Franks, unable to ward off the Mamluk incursion, signed a ten-year truce with Baybars at Caesarea. In June 1283, a second truce designated Caesarea as Muslim property. Finally, by August 1291, Sultan al-Ashraf Khalil captured Acre, along with the last stronghold of the Latin Kingdom, 'Atlit (Château Pèlerin). Having driven the Crusaders from *Outremer*, the sultan ordered the complete destruction of every fortification on the coast to prevent the Franks from ever establishing a foothold in Palestine. Caesarea was no exception.⁷²

⁷¹ Charles of Anjou—brother of Louis IX. The papacy "hired" Charles in 1264 to lead a political crusade into Sicily against Manfred, Frederick II's illegitimate son. Charles received title as king of Sicily in 1266. His kingdom expanded throughout the Mediterranean with papal blessing. Riley-Smith, *The Crusades*, 168-169.

⁷² Riley-Smith, *The Crusades*, 204-207; Hazard, "Caesarea," 88-89.

MILITARY STRATEGY IN THE LATIN KINGDOM

Life in the Latin settlements was bound to be dominated by military necessity. The Latin occupation of the region does not seem to have been governed by any high strategic principles. Occupation proceeded piecemeal as the opportunity arose . . . Effective authority over a district depended on the possession of castles or walled towns from which it could be administered and defended. This factor, and the chronic shortage of manpower, which demanded fortifications so strong that they could be garrisoned with comparatively small bodies of men, led to remarkable programmes of castle-building, the relics of which can still be seen.¹

The idea of military strategy implies centralized planning around a clearly defined objective in order to gain advantage over the enemy. Given this definition, it is accurate to state that Frankish activity in the Latin Kingdom was only occasionally strategic. From the outset, the Crusaders' military objective was muddled with religious rhetoric and lacked any true measure of attainability. Pope Urban's speech at Clermont in 1095 incited Christians to rescue the Eastern Church, reclaim Jerusalem, and free the sacred sites. Although suffering significant setbacks, the First Crusade ultimately responded to these initiatives. However, the campaign's apparent success was only temporary. Following the siege of Jerusalem, a weakness in the objective began to surface as the Franks realized the long-term futility of their enterprise. They had arrived in Palestine with no organized plan for securing their conquered lands. They were

¹ Riley-Smith, *The Crusades*, 77.

suddenly faced with having to contain a vast indigenous population, hostile to their mission on nearly every level, and a mounting Muslim military threat encompassing the borders of the Latin colony. Lacking sufficient resources, manpower, and committed support from the West, the Crusaders sought to govern a territory they could never hope to occupy, a kingdom they could never adequately defend. Their initial conquest left them unprepared for the military challenges of the next two hundred years.

Despite the lack of military planning for sustained Latin occupation in the Levant, the Franks proceeded to make the best of their situation. As seamen marooned on a desert island, they revealed a certain strategy for survival as they adapted to the obstacles confronting them. The twelfth century was a period of hopeful expansion. The Franks assessed their surroundings and took steps to secure their perimeter, especially the fortified cities along the Palestinian coast. In an effort to control the native population and establish a social and economic infrastructure, they divided the kingdom into feudatories with the fortified cities serving as administrative centers of control. As the Muslim powers began to pressure the kingdom's borders, the king of Jerusalem attempted to establish diplomatic support links with the West to provide additional men and financial resources. However, by 1187, the appeals for aid had gone unanswered for too long. In that year, Saladin altered the balance of power in the East and led his troops on a devastating campaign of destruction throughout the Latin Kingdom. Occupation in the thirteenth century thus found the Crusaders in retreat. Their army was too weak both numerically and tactically to repel the Saracens on the battlefield. Consequently, they reverted to the cover of their fortresses, using them as staging bases for raids and places of refuge against the rising tide of Muslim incursion.

In a determined effort to hold on to territory, the Franks relied on their walls of stone to compensate for shortage of men and resources. In this way, the walled fortifications became the center of conflict in the Latin Kingdom. Siege warfare largely characterized the military activity of the second half of Crusader occupation as the Muslims sought to eradicate the Franks by depriving them of their strongpoints.

The city of Caesarea was only one of several walled fortifications that serviced the military and non-military needs of the Crusaders throughout their occupation in Palestine. However, as one of the major population centers in the Latin Kingdom, Caesarea witnessed every move of the Crusaders' prolonged battle to hold territory in the Levant. Situated on the coast, Caesarea was one of several fortifications captured during the initial conquest of the western frontier. Valued for its rich agricultural lands and access to the Mediterranean, Caesarea became one of the largest economic feudatories in the kingdom. The walled-city demonstrated how the Franks relied on fortifications to serve as centers of authority to support their imposed process of colonization. Later, as Muslim forces reduced the Latin strongpoints, Caesarea suffered two devastating assaults toward the end of the twelfth century. The following period of occupation witnessed irrecoverable defeat of the Frankish army on the battlefield. Consequently, the Franks doubled their efforts to secure themselves behind walls of stone, strengthening Caesarea's defenses to counter the tactics of Muslim siege craft. Thus, throughout the history of the Kingdom of Jerusalem, settlement at Caesarea revealed an unfolding progression of Crusader military strategy designed to perpetuate Latin survival in the East. The strategy, although piecemeal and unplanned, centered on

using walled fortification as the primary means of supporting Frankish occupation in the Latin Kingdom.

Frontier Security and the Conquest of the Palestinian Coast

Following the capture of Jerusalem in 1099, the Crusaders' military agenda concentrated on securing the frontiers of the newly established Latin Kingdom. There were three outlying regions requiring immediate attention. In the north, there was the frontier beyond the Sea of Galilee facing the Turks of Syria and their capital of Damascus. There was also the region southeast of Jerusalem following the desert boundary line of the Rift Valley down to the Dead Sea. However, the most important frontier was the western coastal region, a 250 kilometer strip from Ascalon to Beirut.² Governed by the Muslim emirs, the harbor cities posed the greatest threat to the Latin Kingdom. The Crusaders could not adequately control the coast since they did not have a fleet. In addition, the Fatimids in Egypt had a naval force capable of launching an invasion of Palestine using the Muslim held seaports as beachheads. Beyond the military threat, acquisition and control of the Palestinian coast offered the Crusaders the highest potential in economic and strategic benefits. The coastal cities formed a line of fortifications controlling the western boundary of the Latin Kingdom. They also occupied the Sharon Plain, one of the richest agricultural regions in Palestine, well suited for commercial investment. In addition, the Crusaders needed the seaports as vital links to the West, securing communication, promoting trade, encouraging traffic of settlers

² Prawer, *Crusader Institutions*, 472-473.

and pilgrims, and most important, providing landing sites for military supply and personnel.

Upon the Crusaders' arrival in the Levant, the Fatimids of Egypt were the only naval power capable of disputing Frankish interests in the Mediterranean. In 1099, they had a fleet of seventy warships based out of Alexandria. They also occupied all of the coastal cities in Palestine and established forward operating bases at Ascalon, Acre, and Tyre. These strategic seaports enabled the Fatimids to deploy their squadrons effectively up and down the seaboard and provide supply points for their ships, yielding them complete control over the Levantine coast. During the siege of Jerusalem, a Fatimid squadron operating near Jaffa trapped the Genoese fleet attempting to aid the Crusader assault. Although the Egyptian navy withdrew from Palestine following the fall of Jerusalem, the Crusaders feared the possibility of an Egyptian counter invasion. In light of Jerusalem's vulnerability to the coast, situated only sixty kilometers from the port at Ascalon, Eustace Granier and Tancred met at Caesarea in August to discuss the Fatimid threat. Later that month, their concerns proved valid. The Fatimid army crossed overland and met the Franks near Ascalon. Although the Crusaders succeeded in defeating this first Muslim challenge, the incident demonstrated the problem of security on the western frontier. As long as the coastal cities remained under Muslim control, Fatimid aggression could thwart any Crusader attempt to conduct naval operations along the Palestinian coast.³

In addition to security issues, the Crusaders needed to control the seaports along the Mediterranean to gain strategic lifelines to the West. Survival over the long term

³ Pryor, *Geography, Technology, and War*, 112-114; Smail, *Crusading Warfare*, 64.

depended on the Franks' ability to replenish their limited manpower and financial resources through maritime connections with their patrons in Europe. Although the Crusaders never possessed their own fleet, they used diplomatic maneuvering to secure the naval assistance of the Genoese. They learned the value of this arrangement for the first time during the siege of Jerusalem. Despite the Fatimid blockade at Jaffa, William Embraico's fleet provided essential supplies and skills needed for constructing the Crusaders' siege works. The Franks now endeavored to occupy a vast territory in which they were a numerical and cultural minority. Acutely aware of the Egyptian threat, and seeking to buy time, Godfrey de Bouillon established treaties with the emirs of the coastal cities. Diplomacy and tributary alliances served to contain the Muslim threat. However, in time, Godfrey knew the Franks would have to capture the seaports, both to deprive the Fatimids of their forward bases and secure the harbors for European shipping. Caesarea was one of eight strategic cities on the coast deemed vital for establishing the umbilical cord to the West.⁴ However, a campaign to capture the walled cities on the coast required maritime support to discourage likely Fatimid naval intervention.

In their plans for conquering the western frontier, the Franks were in line for inheriting and controlling the coveted trade routes along the Levantine coast. This prospect became a valuable bargaining aid for a military in need of naval assistance. Italian maritime interest in the region, enhanced by the commercial value of the seaports, enabled the Crusaders to acquire the aid of the Genoese navy. Apart from sharing in the

⁴ From south to north, the eight port cities were Gaza, Ascalon, Jaffa, Arsuf, Caesarea, Haifa, Acre, and Tyre. The most significant were Tyre, Jaffa, and Acre. Benvenisti, *Crusaders in the Holy Land*, 75-76.

religious concerns of the Crusaders, Italian merchants like William Embriaco had strong economic interests in the Latin Kingdom. The Franks, in turn, recognized the commercial advantages associated with attracting Italian merchant trade to the seaports. Surrounded by rich agricultural lands, these cities could provide the financial revenues needed to support the kingdom and its military defense. Shared Frankish-Genoese economic interests resulted in a combined effort to seize the Palestinian coast. In exchange for naval support, Baldwin I, Godfrey's successor, promised the Italians a third of all conquered towns and surrounding lands, judicial independence, and exemption from taxation. The king's men inscribed the terms of the contract in gold, preparing a commemorative plaque for display in the Church of the Holy Sepulcher.⁵

In 1101, with the assistance of Embriaco's fleet, Baldwin I launched a ten-year campaign to reduce and capture the fortified cities along the Levantine coast. Caesarea fell in the first year. As the Crusaders systematically captured the seaports, the Egyptians lost their vital satellite bases. Deprived of havens providing watering facilities, and forced to retreat to Alexandria, Baldwin severely limited the operating range of the Muslim fleet along the Palestinian coast. Although the Fatimid navy attempted to counter Italian maritime support, the Crusaders gradually achieved naval supremacy in the Mediterranean. By 1110, the Franks occupied all the fortifications along the sea except Tyre and Ascalon. Later, with the assistance of Venetian naval

⁵ Jonathan Phillips, "The Latin East: 1098-1291," in *The Oxford Illustrated History of the Crusades*, ed. Jonathan Riley-Smith (Oxford: Oxford University Press, 1995), 117-118; T. S. R. Boase, *Kingdoms and Strongholds of the Crusaders* (New York: Bobbs-Merrill, 1971), 36.

support, Baldwin II conquered Tyre in 1124. Baldwin III finished consolidating Frankish power on the western frontier with the fall of Ascalon in 1153.⁶

Domestic Challenges—the Imposition of Feudalism

The conquest of the Palestinian coast, along with further expansion of the northern and southeastern frontiers during the first half of the twelfth century, posed a significant challenge to Frankish authority in the Latin Kingdom. The Christian lords and knights who set out to govern the territory were a small minority in contrast to the vast indigenous population. Comprised of Syrian Christians, Muslims, and Jews, the native Palestinians numbered half a million, while the Frankish settlers at the height of expansion were only 140,000 with a maximum fighting force of less than six thousand.⁷ This disproportion characterized the problem of Western colonization throughout the history of the Latin Kingdom. Although militarily formidable, the Crusaders lacked manpower, and numerical inadequacies severely limited their ability to control conquered territory. Initially, the Franks planned to use a displacement settlement policy.⁸ As at Caesarea, they depopulated the captured city of its native residents, forcing all the surviving citizens to flee to the countryside. With the city vacated, the second stage of the plan called for settlement by Westerners migrating from Europe. However, despite the Crusaders' exploits, European citizens never traveled to the Holy Land in sufficient numbers to establish truly Western-peopled communities. In light of their ongoing minority status, the Frankish conquerors resorted to an improvised policy

⁶ Phillips, "Latin East," 116; Hans Eberhard Mayer, *The Crusades* (Oxford: Oxford University Press, 1965), 74-75; T. S. R. Boase, *Kingdoms and Strongholds*, 35-37; Pryor, *Geography, Technology, and War*, 115-116.

⁷ Benvenisti, *Crusaders in the Holy Land*, 18; Riley-Smith, *The Crusades*, 63, 78.

as they sought to govern a land they knew they could never truly occupy. The central component of this strategy was the imposition of a Western feudal administration supported by the establishment of regional fortifications serving as centers of authority.

After the siege of Jerusalem in 1099, Godfrey de Bouillon's policy for occupying and controlling Palestine addressed the need to defend the kingdom and reward his vassals in keeping with feudal custom. The first ruler of Jerusalem created four fiefs to serve as military and administrative occupation zones within the Latin Kingdom. Godfrey retained the central area of Jerusalem for himself, along with Ramla, and Jaffa, and a belt of land extending to the coast. He gave the northern sector of Galilee to Tancred, one of his most ambitious lords. In addition, he assigned Tancred eighty of his three hundred knights to aid in the military occupation of the Galilee's two largest urban centers, Bet She'an and Tiberias. Godfrey entrusted the southeastern frontier, with the cities of Jericho and Hebron, to Galdemar Carpenel, a nobleman from Lyon who had decided to remain with Godfrey to defend the Latin East. Garnier of Grez, Godfrey's blood relative, inherited the central region of Samaria.⁹

Feudal divisions were particularly advantageous as a form of administration in the Levant because they delegated the responsibility for defense of the kingdom to wealthy nobles who could recruit and sustain their own armies. This was particularly important since few Crusaders remained in the East after the siege of Jerusalem, and Godfrey's personal resources were scarcely adequate to administer the parcel of land around Jerusalem. Feudal land assignments also rewarded these military leaders with

⁸ Riley-Smith, *The Crusades*, 46.

⁹ Jonathan Riley-Smith, "The Motives of the Earliest Crusaders and the Settlement of Latin Palestine, 1095-1100," *The English Historical Review* 98 (1983): 735; Riley-Smith, *The Crusades*, 42.

the titles and honors sufficient to motivate them to excel in their administrative tasks. Following Godfrey's brief reign, Baldwin I and his successors added further fiefdoms to accommodate newly conquered territories, and eventually, these administrative units numbered twenty-seven. In 1110, Eustace Granier received title as lord of Caesarea. By 1160, Caesarea had emerged as one of four great fiefs representing the power of the outstanding families in the Latin Kingdom. Due to their economic and political prosperity, this growing class of elites strengthened its position relative to the king as the security of the realm ultimately depended on the resources of the fiefs and their lords.¹⁰

Feudal administration in the Latin Kingdom was an adaptive enterprise, the attempt of a minority ruling class to control a vast, potentially hostile, peasant population. Unable to settle the land themselves, they turned to the indigenous population to till the land and support the economic life of the fief. Among these native peoples, the Franks showed the greatest regard for the Syrian Christians based on their religious ties to the Eastern arm of the Church. Baldwin I brought a large contingent of Orthodox Christians from Transjordan to populate the city of Jerusalem, and successive kings allowed them certain independent legal rights. Despite these apparent overtures of trust, the Crusaders viewed their estranged brethren as heretical and subversive, unworthy of full citizenship in the Latin Kingdom. The Orthodox Christians had lived in peace under Muslim rule, and much to the dismay of the Frankish rulers, maintained cooperative relationships with the Saracens throughout the Crusader occupation. In 1187, the Orthodox community of Jerusalem actually turned on the Franks and offered

¹⁰ Besides Caesarea, the other great fiefs were the county of Jaffa-Ascalon, the principality of Galilee, and the lordship of Oultrejourdain with St. Abraham. Mayer, *The Crusades*, 155-157; Riley-Smith, *The Crusades*, 67-68; Benvenisti, *Crusaders in the Holy Land*, 12-15.

Saladin their allegiance from within the city walls.¹¹ The Muslims comprised the majority, nearly eighty percent of the indigenous population.¹² Surprisingly, many Muslim peasants fared better under Frankish rule in comparison to their previous servitude and economic exploitation under the caliphs. The Islamic system of agricultural lord-serf relationships, known as *latifundia*, resembled the institution of Western feudalism, and paved the way for the Crusaders' super-imposed colonial administration in the twelfth century. The peasant population experienced little change with the replacement of the Muslim ruling class by the Crusader conquest. For this reason, most Arab peasants were content to submit to their Western lords, even though they rejected Frankish right to rule and maintained their religious and cultural ties with the Islamic powers. Similar to the Syrian Christian population, however, apparent submission and loyalty was fleeting in time of Muslim incursion. Although the feudal lords greatly feared these disloyal tendencies, Frankish lack of manpower precluded their ability to control native uprisings. The Crusaders freely assimilated the indigenous population into the economic operation of their fiefs, not because the lords trusted their allegiance, but because they had no other alternative.¹³

Threat of domestic instability within the fief required the ruling lord to maintain a force capable of sustaining administrative order. For this reason, the Franks relied on their fortifications to support every region of occupation. Garrisons were the vital centers of political, economic, and social control, enabling the lord to exercise authority over the surrounding territory while protecting himself, his knights, and Frankish

¹¹ Smail, *Crusading Warfare*, 48-53.

¹² Benvenisti, *Crusaders in the Holy Land*, 18.

¹³ Smail, *Crusading Warfare*, 53-59; Mayer, *The Crusades*, 176-177.

inhabitants from peasant uprising. In this way, fortification structures in the Latin Kingdom served domestic, non-military functions and contributed more to internal security than border defense. Citadels rarely prohibited an enemy from advancing past a demarcation line. In most cases, the Crusader fortresses, whether inherited through conquest or newly constructed, had very little to do with forming frontier lines of defense. Rather, their geographic distribution formed a series of points based on the pattern of Latin settlement to establish domestic control across the fiefdoms. Against a vast indigenous population, the fortifications were primarily centers of colonization, supporting the feudal economic and political functions of the realm.¹⁴

As one of the coastal fiefs, Caesarea had one of the largest population centers in the kingdom. At the height of Latin settlement in the last half of twelfth century, 140,000 Europeans lived in Palestine. Of these Frankish settlers, 120,000 lived inside walled cities, most of which were along the Mediterranean coast. Caesarea had a population of five thousand.¹⁵ Caesarea's feudatory domain, or bourg, extended to the limits of its ancient territory, encompassing 1,900 square kilometers of rich agricultural land dotted with a hundred Arab peasant villages. In addition to the central city of Caesarea, the fief had satellite fortifications spread throughout the region, including the strong castle at 'Atlit (Château Pèlerin), the towns of Merle (Tantura) and Qaqun, and numerous smaller citadel-residences such as Qalansuwa and Al-Burj al-Ahmar (the Red Tower). Through his appointed officers stationed at these rural strongpoints, the lord of Caesarea was able to establish his authority over the peasants and administer the

¹⁴ Smail, *Crusading Warfare*, 59-63; Pringle, *The Red Tower*, 13.

¹⁵ Benvenisti, *Crusaders in the Holy Land*, 27; Riley-Smith, *The Crusades*, 63; Mayer, *The Crusades*, 177.

countryside.¹⁶ The walled-city of Caesarea functioned as the administrative center, securing the economic and political activities of the fief. The lord had a feudal obligation to provide twenty-five mounted knights to the king, while the archbishop and merchants were each responsible for fifty sergeants. With this military contingent at the garrison, the lord had sufficient military forces to exercise control over the bourg and defend the fortification walls. Most of the five thousand Frankish settlers lived within the city, including the lord and his military and government officials. With a harbor and Italian merchant quarter supplied by the rich agricultural produce from the bourg, the city flourished as a trade center. The fortification provided storage facilities, offices for tax and revenue collection, and buildings for government records, all of which stabilized and encouraged economic activity. Caesarea was also a center of religious authority, holding the seat of the archbishop at the Cathedral of St. Peter.

In addition to promoting commerce within the city, well-fortified centers such as Caesarea revitalized the rural economies of their surrounding regions. The citadel instilled the confidence necessary to encourage the rural population to live and work near the fortress uninhibited by fear of raids or disturbances. During periods of crisis, the peasants knew they could secure their harvested crops in the city warehouses and evacuate the countryside with their livestock to seek refuge behind the walls. In turn, the city inhabitants depended on these agricultural supplies on a continuing basis, especially in preparation for siege. The very ability of the fortress to withstand assault depended on having a rural peasant population near the city. The Crusaders were keenly aware of

¹⁶ Pringle, *The Red Tower*, 13; Marshall, *Warfare in the Latin East*, 123-124; Benvenisti, *Crusaders in the Holy Land*, 15; Holum, *Herod's Dream*, 220; LaMonte, "Lords of Caesarea," 145.

the vital interdependence between peasantry and garrison in supporting the feudal system of administration. If the fortress weakened, their control over any given region was in jeopardy.¹⁷

The Manpower Dilemma—Lack of Support from the West

Following the initial period of expansion and acquisition of the coastal region, the pattern of Latin military activity in Palestine quickly became a defensive enterprise. The primary factor limiting offensive pursuits, shifting the focus to holding territory, was the debilitating lack of Frankish manpower in the Levant. Although as many as twenty thousand soldiers participated in the siege of Jerusalem during the First Crusade, most of the Frankish combatants returned home after the victory, leaving Godfrey de Bouillon with less than three hundred knights and one thousand footmen.¹⁸ An army of 1,300 Franks was no match against the vast recruits available to the Muslim armies, nor was it sufficient to occupy and control the whole of Palestine. Even after a century in the Holy Land, the typical Crusader force numbered in the hundreds while the Muslims could field anywhere from twenty to forty thousand in a single engagement. The most powerful force raised at any time in the Latin kingdom was 2,600 mounted knights and sergeants to oppose Saladin in 1183.¹⁹ Toward the second century of Crusader occupation, the Franks, always outnumbered on the battlefield, adopted the fortress as their primary means of holding territory in the Latin Kingdom.

¹⁷ Kristian Molin, "The Non-Military Functions of Crusader Fortifications, 1187-circa 1380," *Journal of Medieval History* 23:4 (December 1997): 378-383.

¹⁸ Godfrey's papal letter cites twenty thousand at Jerusalem, but this was also the total at Antioch before Bohemond and Baldwin reduced the force by establishing garrisons at Antioch and Edessa. Fedden, *Crusader Castles*, 16; Rogers, *Latin Siege Warfare*, 66.

¹⁹ Fedden, *Crusader Castles*, 17 n.; Marshall, *Warfare in the Latin East*, 147.

Under such circumstances, the Crusaders developed a survival mentality and rarely exercised any true military strategy. At first, they sustained their foothold in Palestine through treaties with the local emirs and alliances with Italian fleets. They also depended on perennial waves of Crusaders and pilgrims from the West to support their military campaigns. Later, the Kings of Jerusalem desperately appealed to the West for large-scale military aid and financial support. The extent of these diplomatic efforts in the twelfth century demonstrated the degree to which the Crusaders viewed the severity of their manning problems.

By the second decade of Latin occupation, lack of manpower compelled the Franks to launch a sustained diplomatic effort to seek military support from the West. In 1119, the shocking results of the battle at the Field of Blood served as a wake up call to Baldwin II and his Frankish lords. In the landmark fight for control of Aleppo in northern Syria, the entire Christian army of seven hundred knights and three thousand foot soldiers perished at the hand of the local Muslim leader, Ilghazi of Mardin. Despite the lessons of past experience, Roger of Antioch, commander of the Christian forces, failed to wait for reinforcements from Jerusalem and fell in battle along with his encircled soldiers. The tragedy underscored the weakness of the Frankish army against the vast numbers of available Muslim troops. It also left King Baldwin of Jerusalem in control of Antioch and the entire Latin East, affording him a unique position from which to address the manpower issue.²⁰

Baldwin II's meeting of ecclesiastical and secular office-holders at the Council of Nablus in January, 1120 was a direct result of the tragedy at the Field of Blood. In

²⁰ Mayer, *The Crusades*, 78-79.

addition to organizing new domestic legislation for the Kingdom of Jerusalem, Baldwin and his lords assessed Frankish military deficiencies and appealed to the West for aid. They directed a letter to the Pope and the doge of Venice, seeking support of the Venetian fleet. Although the Crusaders captured most of the Palestinian coast in the first decade of occupation, Tyre and Ascalon remained under Muslim control. Baldwin wanted to secure Frankish maritime interests by consolidating the coastal cities. The harbor at Tyre was particularly significant since it supplied fresh water to Muslim ships, extending the operating range of the Egyptian navy along the Levantine coast. In return for trading privileges, the Venetians responded to Baldwin's request and sailed to Ascalon in 1123 where they defeated a portion of the Egyptian fleet. In 1124, they blockaded Tyre and worked with the Crusaders to capture the city after a lengthy siege.²¹

In addition to these military alliances, Frankish efforts to recruit eligible bachelors from Western Europe equally demonstrated the need for manpower in the Levant. Not surprisingly, decades of warfare in the kingdom resulted in high mortality rates among the leading men in the East. Continual attrition of lords and nobles posed a significant problem in the context of the security issues facing the Latin Kingdom. In addition to weakening the political and military structure, loss of male leadership created gaps in the feudal system of land title organization. The widows who inherited the fiefs required husbands to produce legitimate male heirs. Although the ladies of the realm might have found suitable husbands within the kingdom, the Crusaders used these opportunities to attract Western men and their resources to relocate in the East. Baldwin

²¹ Jonathan Phillips, *Defenders of the Holy Land: Relations Between the Latin East and the West, 1119-1187* (Oxford: Clarendon Press, 1996), 17-18.

II pursued this aim when he arranged for Count Fulk V of Anjou to marry his daughter Melisende in 1129. Baldwin arranged this union because he had no male heir. The king apparently realized the danger of his situation in 1123 when he was captured, and later released, following the battle at Edessa. In addition to filling the role of male heir, Fulk's alliance brought a contingent of men and considerable financial resources to the Latin Kingdom, assets desperately needed in the twelfth century.²²

Diplomatic efforts to seek Western support intensified after the disaster of the Second Crusade and the failed campaign against Damascus in 1149. Emboldened by the Crusaders' defeat and their subsequent return to Europe, Nur ad-Din, the ruler of Aleppo, led his Muslim forces in attacking Latin settlements in northern Syria, resulting in the death of Prince Raymond of Antioch. These skirmishes further weakened the Frankish forces by discouraging the inflow of pilgrims to the Holy Land and draining vital financial resources. Letters went out to the West from both church and secular leaders pleading for additional knights, arms, and finances to hire mercenaries and build fortifications. Diplomatic embassies appealed to the West for military assistance nearly every year from 1163 to 1174.

The situation grew desperate in 1169 when Nur ad-Din captured Egypt. In the spring of that year, King Amalric of Jerusalem called an assembly to assess the new international threat. The council selected the archbishop of Caesarea to sail to the West with an appeal for large-scale military assistance. Although the mission initially failed due to stormy seas, the archbishop of Tyre eventually arrived in France with a letter from King Amalric addressed to Louis VII. Hoping to spark the start of a new Crusade,

²² Phillips, *Defenders of the Holy Land*, 19-22.

Amalric's letter contained every form of persuasive argument, appealing to Louis' family obligations and duty to God and Christendom. He emphasized the possible threat of Egyptian blockade of the coastal cities, disruption of trade, and the inability of Western pilgrims to fulfill their vows and travel to the holy sites to atone for their sins. He also stressed how Muslim raids had weakened the settlers' strength to resist and warned that the very future of the Kingdom of Jerusalem was in peril apart from Western military aid. However, due to political distractions in Europe, including the turmoil surrounding the murder of Thomas Beckett in 1170, Louis failed to respond to Amalric's request. In desperation, Amalric traveled to Byzantium in 1171 and pursued a nontraditional military alliance with the Greek emperor, Manuel Comnenus. He also simultaneously dispatched envoys to Sicily to seek naval support. Despite the relative success of these appeals, the Latin Kingdom continued to suffer from the pressure of limited manpower against a rising Muslim threat. Decades of declining Frankish military strength in the Levant allowed Saladin to succeed Nur ad-Din in Egypt and consolidate his power.²³

The Rising Tide of Muslim Unification

Intensifying diplomatic appeal to the West for military and financial support in the middle of the twelfth century was a function of increasing Muslim unification threatening the security of the Latin Kingdom. Early Latin success in the East came as the result of fortuitous timing rather than military force strength. The Franks were always a vulnerable minority. The Crusaders' initial conquest and prosperity were only

²³ Phillips, *Defenders of the Holy Land*, 168-224.

possible because of the debilitating political divisions and military disorganization present in Islam during the first phase of Latin occupation. However, through the efforts of such charismatic leaders as Zengi, Nur ad-Din, and Saladin, the Muslim peoples surrounding the Latin Kingdom from Egypt to Syria eventually joined forces in a unified *Jihad*, or holy war, against the Latin settlers. Toward the end of the twelfth century, Muslim military initiative devastated the Crusader army and left much of the interior of the Latin Kingdom in ruin. More than ever, the Franks came to depend on their fortifications to bolster their attempt to hold territory and counter the destructive advance of a revitalized Muslim force.

In the period during and immediately following the First Crusade, the Muslim powers were embroiled in a power struggle that paralyzed their ability to repel the Latin invasion. On an international level, the Muslim populations of Egypt and Syria opposed one another politically. The Shi'ite Fatimids in Egypt contested the legitimacy of the 'Abbasid Caliphate of Baghdad which controlled the Sunni faction in Syria. Within the major Muslim powers, although the Fatimid dynasty had consolidated its power in North Africa, the Seljuk Turks in Syria, recent converts to Sunni Islam, remained divided over internal political conflicts of interest. Succession disputes and civil war absorbed their attention. Similar to the feudal system in the West, the emirs of these Syrian provinces acquired their title, or *iqta'*, from the Seljuk sultan as a reward for service to the state. Each emir governed with near autonomy and maintained a military force which he supplied to the central government in time of crisis. Unity within the Seljuk dynasty depended on the power of the sultan to control the emirs. However, at the time of the

First Crusade, the age of the great Seljuk leaders had passed and the local emirs were as interested in conquering one another as they were in repelling the Frankish invasion.²⁴

Political rivalries in Syria fractured the administrative structure and seriously weakened the sultan's ability to organize a substantial military force. Although the sultan did hold some Turkish troops in permanent military service, the emirs and their contingents provided the majority of the soldiers. Self-interest among these part time warriors prevented the Seljuks from maintaining a professional army. Primarily devoted to the agricultural and economic concerns in their individual provinces, the emirs grew weary of lengthy campaigns. For this reason, Muslim military operations were especially dependent on the seasons. Sultans had trouble raising troops during the harvest, and most soldiers were unwilling to forgo the opportunity of returning home when winter rains made troop movement unpleasant. In addition, while on *Jihad*, the emirs and their contingents demonstrated more interest in acquiring plunder than seeking heavenly reward for their services, leading some to forsake the mission in search of treasure. Such preoccupations among Saladin's troops contributed to his defeat at Mont Gisard in 1177. Political infighting, distractions with land interests at home, and pillaging priorities crippled the effectiveness of the Muslim army and gave the Latin settlers a decisive advantage in the first eighty years of their occupation.²⁵

Syrian rivalries and international disputes with Egypt did not keep the Muslims from challenging Frankish power. The Egyptian fleet posed an immediate threat to the western frontier of the Latin Kingdom, and the Syrian Seljuks launched several counter

²⁴ Smail, *Crusading Warfare*, 64-8.

²⁵ Smail, *Crusading Warfare*, 71-75.

invasions in the north, including their decisive victory at the Field of Blood in 1119. However, these limited campaigns achieved only temporary effects, and Muslim military leaders were desperate to unite the factions in order to achieve greater results. The concept of *Jihad*, a comprehensive religious offensive, gained popular support under Zengi's reign. 'Imad ad-Din Zengi came to power in 1126 after a Shi'ite faction in Syria, known as the Assassins, murdered the governor of Mosul. Zengi launched a series of conquests within the Christian occupied territories and succeeded in taking Edessa in 1144, the capital of the first Latin state. The symbolic victory won the praise of the caliph in Baghdad and united the Syrians in a holy war against the Franks. Although Zengi was assassinated by one of his slaves in 1146, his son, Nur ad-Din, sustained the vision of *Jihad* following the failure of the Second Crusade. Invoking theological persuasion, Nur ad-Din vehemently called for the spiritual unification of Islam in order to reclaim Jerusalem and the coastal cities from the Franks. Using force to depose his rivals, Nur ad-Din took control of Damascus and succeeded in uniting all of Muslim Syria by 1155.²⁶

While Crusader preoccupation with Egypt allowed Nur ad-Din to consolidate his power in Syria, King Amalric's campaigns against North Africa threatened Muslim resistance on the southern border of the Latin Kingdom. Laying aside political differences, Nur ad-Din sent his general, Shirkuh, to bolster the Fatimid forces. In 1169, Shirkuh became the vizir of Egypt, thus establishing the former rival nation under Nur ad-Din's suzerainty. This union spelled disaster for the Latin Kingdom of Jerusalem. After Nur ad-Din's death in 1174, Shirkuh's nephew, Saladin, became vizir of Egypt.

²⁶ Riley-Smith, *The Crusades*, 79-81.

Faithful to Nur ad-Din's vision, Saladin immediately abolished the Shi'ite Fatimid dynasty and submitted Egypt to the 'Abassid Caliphate. He then marched north to Syria and occupied Damascus. Proclaiming the propaganda of *Jihad* against the Western settlers while deposing his Muslim rivals, Saladin spent the next decade unifying Nur ad-Din's territories. Although he launched several invasions against the Latin settlements during this period, his first major victory came at the Horns of Hattin in the hills west of the Sea of Galilee in 1187. This battle marked the end of an era in which the Crusaders relied on Muslim political division to compensate for their limited military strength. Following the Frankish defeat at Hattin, Caesarea, along with many of the coastal fortresses, fell to Saladin's invasion force. The Muslims succeeded in taking Jerusalem itself, ending a period of eighty-eight years of Crusader occupation in the capital. Exposed to Muslim incursion as never before, the Franks turned to their walls of stone with a new sense of urgency, repairing and improving the city fortifications and building new castles to support their military presence across the Kingdom.²⁷

Failure on the Battlefield—The Crusader Army in Decline

Saladin's stunning victory at the Horns of Hattin in 1187 vividly demonstrated the Crusaders' inability to counter the unified Muslim forces on the battlefield. The new king of Jerusalem, Guy de Lusignan, assembled the largest army in the history of the Latin Kingdom, going beyond feudal obligations to summon all able-bodied men to respond to the national emergency. The total Christian force numbered eighteen thousand, including twelve hundred heavily armored knights and four thousand light

²⁷ Riley-Smith, *the Crusades*, 81-83; Fedden, *Crusader Castles*, 20-23.

cavalry. In contrast, Saladin's army dwarfed the Franks, totaling thirty thousand with twelve thousand cavalry. After a long march through the fierce heat of the Galilee, the Franks, baking in their heavy armor, camped in the arid hills west of Tiberias. The Muslims blocked the passage to the Sea of Galilee and torched the grassy hills surrounding the Crusaders' encampment, seeking to exasperate the Franks' heat exhaustion and thirst for water. Saladin's light armored forces surrounded the Frankish troops, preventing their retreat. On the following morning, 4 July, King Guy marshaled his troops on a hill crowned with two peaks, or "horns," and led his knights in two ineffectual mounted charges against the Saracens. Saladin's troops advanced and tightened around Guy's position. After a futile last stand against the vast Muslim army, Guy surrendered to the greatest defeat in the history of the Latin Kingdom. Nearly the entire Frankish army was destroyed or taken captive.²⁸ The disaster of Hattin and its equally catastrophic consequences throughout the Kingdom of Jerusalem underscored the Crusaders' weakness against the Muslims on the battlefield. This revelation significantly altered military strategy in the Levant, leading the Franks to forsake their paradigm of the pitched battle and rely on the fortress to serve as the key in holding their conquered lands.

Above all other warrior opponents in the Levant, the Crusaders had the greatest fear and professional admiration for the Syrian Turks. Whereas the Arabs in Egypt used tactics and weaponry familiar to the Franks, the Seljuk Turks posed new challenges on the battlefield. Unlike the heavily armored Crusader knights, the Turks were masters of

²⁸ Raymond of Tripoli and a small party were the only Franks to escape. King Guy himself was captured. Mayer, *The Crusades*, 131; Riley-Smith, *The Crusades*, 85-87; Verbruggen, *The Art of Warfare*, 86.

maneuver and flexibility. Their skilled horsemanship, light armor, and adept use of the bow from the saddle yielded them a pace and agility that effectively defeated the Crusader battle strategy. The Turks used this mobility to their advantage in several ways. While the Franks preferred to maintain close, organized formations in preparation for the mounted charge, the Seljuks' use of maneuver allowed them to remain at a distance and engage the Franks only when the knights were most vulnerable to attack. Avoiding the mounted charge, the Seljuks could initiate their assaults, regroup, and reengage at their choosing. In addition, the Turks repeatedly used their mobility to outflank and surround the enemy, defeating the Crusader's defensive lines. This tactic worked especially well while the Franks were on the march. Taking the column by surprise, the Seljuk raiding party could rapidly advance against the formation, move beyond the front of the column and surround the ranks in a swarm of mounted archers. The Turkish bowmen fired their piercing arrows while retaining a pace and distance that made them nearly invulnerable to counterattack. The Crusaders were unable to compensate for these tactics due to their highly regimented approach to field combat centering on the heavy armor and momentum of the mounted charge.²⁹

After 1187, tactical supremacy, in combination with the Muslims' overwhelming numbers, threatened the combat capability of the Crusader army. Frankish investment in pitched battles drained the kingdom of men and vital resources. Although the launch of a new Crusade could temporarily swell the army's ranks and enhance its effectiveness, the Latin Kingdom could not regularly depend on such outside support. In the first part of the twelfth century, the king of Jerusalem relied on his feudatories, like Caesarea, to

²⁹ Smail, *Crusading Warfare*, 75-86; Marshall, *Warfare in the Latin East*, 181.

supply the necessary troops. However, these feudal quotas were never sufficient to meet the overall security needs of the kingdom. In addition, by the end of the century, Saladin's invasion had decimated Caesarea and many of the other coastal garrisons, further contributing to the king's severe manning crisis. Continually faced with a shortage of manpower, the Franks relied on hired mercenaries, pilgrims, and the independent Military Orders, the Templars, Hospitallers, and Teutonic Knights, to supplement their weakened forces. However, dependence on these manning sources exacted a toll on the vitality of the military establishment. Mercenaries participated as long as they were paid. However, financial resources were scarce, and kings could not always afford to hire troops. Pilgrims visited the Holy Land for reasons other than military participation and were not always reliable. The Military Orders were also unpredictable. Originally established as religious missions to assist pilgrims traveling to Jerusalem, the Orders rapidly militarized and secured their own land titles in Palestine during the course of the twelfth century. Although their religious sponsors channeled wealth into the Levant, the Orders functioned as autonomous religious and political powers and were often embroiled in conflict with one another and the king. In addition, despite the fact the Hospitaller, Templar, and Teutonic knights were among the most exceptional warriors, they always served the king as allies, not as loyal subjects. Similar to the mercenaries and pilgrims, reliance on the Orders denied the king complete control over the military apparatus.³⁰

By the thirteenth century, as the Latin army proved incapable of meeting the Muslim threat on the battlefield, the Crusaders began to appreciate the strategic value of

³⁰ Smail, *Crusading Warfare*, 87-99; Marshall, *Warfare in the Latin East*, 48-67.

their fortifications above the potential of their mailed horsemen. Field combat posed too high a risk. Sending troops to face the enemy in pitched battle meant leaving the fortress undefended since Frankish manpower was inadequate to conduct both operations simultaneously. Consequently, the walled fortification became the center of military operations. Avoiding large-scale battles, the Crusaders reverted to raiding activities in the countryside launched from the safety of the citadel. These low level operations minimized the risk of losing additional troops, served to weaken enemy morale, and provided necessary supplies for the fortress.

As a result of this new shift in strategy, Caesarea experienced a rapid revival after its destruction at the end of the twelfth century. The Crusaders repeatedly fortified the city's defenses, first in 1218, then in 1228, and finally in 1251 upon the return of Louis IX from Egypt. In addition, the Military Orders contributed to building campaigns both at Caesarea and across the kingdom. The Templars and Hospitallers assisted Leopold VI with construction efforts at Caesarea in 1217 and purchased holdings in the surrounding fief. In the same year, within Caesarea's feudal territory, the Templars built a new castle on the coast, Château Pèlerin. Their objective was to provide a staging base north of Caesarea to support troop movements and raiding activities. In 1220, Crusader documents reported that Château Pèlerin housed up to four thousand warriors. The Templars also acquired and took responsibility for maintaining the smaller fortifications, such as the Red Tower in Caesarea's southern district. Increasing Crusader investment in fortification significantly altered the nature of warfare in the Latin Kingdom. As the Franks elected to remain behind their walls of stone, the Muslim invaders, in kind,

turned their focus away from the battlefield toward defeating the Crusaders' strongholds.³¹

Siege Warfare—the Fortification in Combat

In the thirteenth century, intensified Muslim incursion and weaponry and tactics specifically aimed at reducing fortifications made defense of strongpoints the central military priority for Crusader survival. Serving as vital centers of political administration and military control, the life and security of the Latin Kingdom depended on the ability of fortresses to withstand assault and defend their feudal territories. On a local level, the inhabitants of the fief, most of whom lived in the rural lands surrounding the walled-city, had no other refuge in time of invasion. The Crusaders, hopelessly outnumbered on the battlefield, knew their lives depended on the ability of their walls to stand the test of siege assault.

The horrors of siege warfare are evident from the accounts of chroniclers who witnessed the battles at Caesarea. Sackings placed the inhabitants of the city at the mercy of the besiegers, and in most cases, mercy was in short supply. The attackers, embittered and weary through the turmoil of prolonged assault, desired revenge and recompense for their sufferings. The Crusaders themselves best demonstrated this psychological frenzy in their initial capture of Caesarea in 1101. They showed no remorse in massacring the Muslim inhabitants in their quest for economic and emotional payback. Badr-ad-Din similarly massacred the Crusader inhabitants of Caesarea during

³¹ Smail, *Crusading Warfare*, 104; Marshall, *Warfare in the Latin East*, 93-95, 115, 134, 145, 182-184; Hazard, "Caesarea," 87-88.

his siege of 1187. Sultan Baybars demonstrated the greatest leniency. During the siege of 1265, the Franks negotiated their surrender after six days in the citadel and Baybars allowed them to depart unharmed by sea. Such instances were rare. Most accounts of siege battles during the Crusades vividly illustrated the bloodthirsty violence, righteous indignation, and lust for booty that surfaced during the sacking of the conquered city.³²

For these reasons, the Crusaders invested heavily in stone defenses, engineering fortifications to resist armed attack for extended periods of time. At a minimum, they could expect the enemy to surround and blockade the city, prohibiting supply and communication for weeks and even months. Of greater concern was the Muslims' mastery of bombardment and digging techniques, both of which were capable of reducing a fortification to rubble long before starvation or thirst might compel surrender. Through their experience with military engagements in the East, the builders became experts on Muslim siege tactics and designed their fortresses to counter specific threats. In this way, the techniques of attack form the proper basis for understanding the architecture of defense in the Latin Kingdom.³³

For the aggressor, the siege was an attractive instrument because it passively converted a defensive fortification into a prison. Towering walls of stone, designed by the city inhabitants to deny the enemy entrance, now became an impregnable fence, prohibiting the citizens from leaving to seek aid or supply. The besieging army simply had to surround the fortress and isolate the inhabitants from the outside world. Given

³² Rogers, *Latin Siege Warfare*, 248.

³³ Kennedy, *Crusader Castles*, 98.

enough time, they hoped the citizens would run out of food and water and simply surrender.

In principle, the blockade technique seemed to guarantee success with little to no risk involved. In practice, however, forcing surrender in this manner rarely achieved the promised result because the Crusaders designed their fortifications to be self-sufficient. Walled-cities such as Caesarea stood prepared with stores of grain and a combination of cisterns and wells to provide water. Caesarea's aqueducts, although certainly cut off in time of siege, normally replenished the city's fresh water reserves. This system insured the city's water supply was always at full capacity, ready for possible siege attack.

There are, in fact, few if any indications that Crusader fortifications ever surrendered due to lack of water, and even those severely suffering from food shortage did not surrender due to famine alone.³⁴ Ironically, food and water supply was more often a concern for the attackers rather than the besieged.³⁵ A successful blockade required large numbers of troops to surround the city and present a credible deterrent to both the inhabitants and their external allies. These forces could expect to live in their encampments indefinitely through sparse winters and arid summers waiting on the city to surrender. Besiegers could not carry sufficient supplies of food and water to support themselves for extended periods. Nor could they often find enough resources in the surrounding area to meet their needs. The first Crusaders suffered severe hardship laying siege to Antioch in 1098

³⁴ Referring to the fortifications built by the Crusaders themselves. Kennedy, *Crusader Castles*, 100-101; Examples of severe water shortage do exist, however, in other fortifications. In the First Crusade, the Crusaders under siege at Xerigordo castle near Nicaea suffered severely from lack of water and resorted to drinking their horses' blood and one another's urine. They also buried themselves in the damp earth, hoping to absorb the moisture. They surrendered after eight days. Gies, *Life in a Medieval Castle*, 189.

³⁵ According to Gies, "A garrison of sixty men could hold out against an attacking force ten times its number, and feeding sixty men from a well-stocked granary supplemented by cattle, pigs, and chickens brought in at the enemy's approach might be far easier than feeding 600 men from a war-ravaged countryside." Joseph & Frances Gies, *Life in a Medieval Castle* (New York: Harper & Row, 1974), 188.

when their food supplies dwindled in the winter months, resulting in a famine that nearly ended the operation. During the hot summer of 1099, they had to transport water from a source five miles away during their siege at Jerusalem. In both cases, the city defenders seemed prepared to survive the duration.³⁶

Logistic limitations prohibited siege operations from becoming merely passive blockade maneuvers, and the Muslim armies mastered the necessary techniques to compel a city's early downfall. The two most common military tactics were mining and siege engine bombardment. Western Europeans were ineffective in using and countering these tactics before the thirteenth century. Instead, the Crusaders were familiar with larger, more costly devices such as movable siege towers and battering rams. Although these implements functioned well during the siege of Jerusalem in 1099, they were generally vulnerable to a specialized incendiary device used by the Muslims known as Greek fire. In addition, the movable towers often required the filling of moats in order to bring them next to the city wall. This was a risky venture since the defenders carefully guarded the moats from rampart positions overhead. Muslim expertise in mining and siege engine tactics introduced new challenges to Crusader defense strategy. Through their exposure to combat in the Middle East, the Crusaders quickly adopted new techniques and adapted their fortifications with innovative countermeasures to enhance their own siege craft.³⁷

Muslim mining was one of the most lethal siege warfare tactics. Highly effective both in its psychological impact and destructive potential, the procedure was insidious,

³⁶ Fulcher of Chartres, *Expedition to Jerusalem*, XVI, XXVII; Kennedy, *Crusader Castles*, 98.

³⁷ Kennedy, *Crusader Castles*, 102-103.

accomplished in secret by diggers and sappers below the fortress. The result was traumatic and devastating. Without warning, the Crusaders could expect an entire tower or section of curtain wall to collapse around them, followed by a sudden invasion of hostile troops through the breach. Mining involved locating a vulnerable layer of subsoil below a fortification and skillfully digging a tunnel to undermine a section of the fortress. Sappers strategically removed sections of foundation stone and used wood props to support the weight of the structures above, thus preventing the tunnel from caving in prematurely. When the undermining work was complete, the attackers set the props on fire and evacuated the tunnel to await the inevitable collapse of the city fortification.

Muslims used mining to defeat several Crusader strongholds, including Belvoir (1188), Saphet (1266), Crac de Chevaliers (1271), and Margat (1285).³⁸ However, the technique did have some drawbacks. Some fortresses, such as Kerak, had foundations built on solid rock and were impossible to mine. Others, like Caesarea, were too close to the coast where sandy soil and ground water hampered tunneling. In addition, the work required many men and was both time consuming and dangerous. Above ground, the miners had to concern themselves with projectiles from the walls overhead. Deep inside the tunnels, they had to face possible countermining activities on the part of the defenders. If able to anticipate the attackers' objective, the city inhabitants might begin their own tunnel from inside the city to break into the mine and attack the diggers.³⁹

³⁸ At Margat, the Sultan simply invited representatives from the Crusader city to come out and inspect the mine constructed underneath their central, circular tower keep. The city inhabitants surrendered immediately, realizing further resistance was futile. Fedden, *Crusader Castles*, 64-65.

³⁹ At Arsuf, the Crusaders dug countermines underneath the Muslim tunnels. They filled them with barrels of oil and lit them on fire, forcing the attackers to retreat. Marshall, *Warfare in the Latin East*, 237.

Another option was to construct a secondary wall at short notice to block the enemy at the level of the mine.

Unlike mining, siege engine bombardment was a highly flexible, low-risk attack technique. Muslims used catapults, or trebuchets, in virtually any situation with astounding results. The psychological and destructive effects associated with continuous bombardment equaled the threat posed by mining. Trebuchets hurled everything from human heads to boulders weighing hundreds of pounds.⁴⁰ William of Tyre recounted the effect of Zengi's bombardment on the Crusader fortification at Montferrand in 1137 in vivid detail.

The very walls shook under the impulse of his mighty engines. Millstones and huge rocks hurled from the machines fell into the midst of the citadel, shattered the houses within, and caused intense fear to the refugees there. Great fragments of rock and all kinds of whirling missiles were hurled with such violence against them that there was no longer any place of security within the walls where the feeble and wounded might be hidden. Everywhere was danger, everywhere hazard, everywhere the specter of frightful death hovered before their eyes. Apprehension of sudden destruction and a sinister foreboding of disaster ever attended them.⁴¹

Catapults underwent a technological revolution during the time of the Crusades. The first trebuchets were the traction or swing beam type, probably originating in ancient China. The Muslims used traction trebuchets in their conquests as early as the seventh century. The traction trebuchet consisted of a swinging wood beam supported on an axle and timber structure. The beam was from five to nine meters long, divided into a long arm and a short arm by the pivot point. At the end of the long arm, the

⁴⁰ Hill, "Trebuchets," 99-114. Siege of Nicaea—the Crusaders "hurled the heads of the killed far into the city, that they (the Turks) might be the more terrified thereat." *Gesta Francorum, The Siege and Capture of Nicaea* (in *The First Crusade: the Chronicle of Fulcher of Chartres and Other Source Materials*, ed. Edward Peters [Philadelphia: University of Pennsylvania, 1971]), 145.

⁴¹ William of Tyre, *Deeds Beyond the Sea*, XIV, 28.

engineers attached a sling designed to cradle the missile, generally a large stone weighing up to 286 kilograms. On the end of the short arm, a series of ropes approximately fifteen meters long provided the means by which a team of men could swing the beam and launch the projectile at the fortress. The pulling team numbered anywhere from forty to 250 men and could launch a 286 kilogram missile nearly a hundred meters.

During the twelfth century, siege warfare in the Latin East served as a catalyst for the introduction of a new, more effective type of catapult known as the counterweight trebuchet. Although actual origin remains uncertain, counterweight designs first appeared in the Middle East in 1165, suggesting that Saladin could have used these improved siege engines in his 1187-89 campaign which successfully reduced so many Crusader fortresses across the Latin Kingdom.⁴² The counterweight design replaced the excessive manpower requirements of the traction trebuchet with a fixed ballast attached to the short end of the swing beam. The counterweight was usually a box filled with stones or sand weighing from ten to thirty thousand pounds. After loading the missile, the launch crew cocked the beam in position by raising the counterweight, securing it with a rope. Firing a projectile required a single man to cut the rope, allowing the ballast to do the work. In addition to saving manpower, the dead weight also provided a fixed, stable swinging action, enabling the operators to fine-tune their accuracy. The counterweight provided greater force, allowing these machines to launch heavier stones

⁴² Whereas Hill cites the first record of counterweight designs to be Italy, 1199, Kennedy provides an earlier date in the Levant based on a recent study of the subject. Kennedy suggests the Byzantines are ultimately responsible for the counterweight design. Kennedy, *Crusader Castles*, 107.

further. Some of these projectiles weighed up to five hundred pounds and could travel three hundred yards.⁴³

The Crusaders' response to Muslim mining and bombardment tactics demonstrated an unwavering commitment to secure themselves within their fortresses, counter threats to the best of their ability, and hope to survive the perils of siege warfare. The fortification at Caesarea provides a telling case study of this determined strategy. From the beginning of Crusader occupation in 1101, Caesarea experienced three siege attacks. After nearly a century of prosperity, Badr ad-Din captured Caesarea in 1187 following Saladin's victory at Hattin. The second siege came in 1219 when Al-Mu'azzam, leading his forces from Egypt to Syria, attacked the city in the wake of the Fifth Crusade. The final assault came in 1265 when Baybars captured Caesarea, leveled the walls, and restored the site to Muslim control. Although each attack resulted in near to complete destruction of the fortification, the Crusaders returned on three separate occasions determined to rebuild and improve Caesarea's defenses. Leopold VI led the first effort in 1218 to repair the destruction of 1187. In 1228, forces assigned to Frederick II rebuilt Caesarea before the start of the Sixth Crusade. The last and greatest construction effort came in 1251 under Louis IX.

Louis IX's refortification represented an architectural leap in technology for Caesarea. The Muslims had little difficulty laying siege against the fortification in earlier years. Badr ad-Din met virtually no resistance in 1187, and Al-Mu'azzam only used three trebuchets to weaken Caesarea's defenses in 1219. These defeats, in contrast to Baybars' later hard-fought siege of 1265, suggest the first century's exposure to

⁴³ Hill, "Trebuchets," 103-106.

Muslim tactics had considerable influence on the modifications and engineering designs incorporated in Louis' later defense strategy.

One of the greatest additions was the glacis, the sloping pyramid-like facing surrounding the entire outer base of the walls. Besides serving to dissuade climbers, the glacis also provided an effective deterrent against mining. Although the Franks formed the smooth outer surface using a double layer of ashlar and mortar, they filled the core of the glacis with rubble, soil, and broken pottery. Its broad base resting on the bottom of the moat effectively increased the total weight and depth of the wall. The heavy static pressure on the soil below made tunneling under the wall quite difficult.⁴⁴

Another feature incorporated by Louis was the use of granite columns in the foundations of the citadel. The Crusaders laid these massive Byzantine columns horizontally throughout the buttress surrounding the fortification walls to create an impenetrable barrier. Baybars' siege is the first mention of mining at Caesarea. His crews tried to find a way to undermine the citadel when the Crusaders retreated to the fortress for refuge. The granite laden walls and the sea moat in front of the citadel made the mining operation impossible.

Although Caesarea's three posterns may have originated before Louis IX, it is clear from their construction that Louis considered these features significant enough to reconstruct them as part of his work on the glacis in 1251. Tactically, the posterns served as a countermeasure against siege engine bombardment. They allowed Caesarea's soldiers to exit the fortification long enough to launch surprise raids against the enemy's offensive weaponry. Louis positioned these covert passageways in the

⁴⁴ Prawer, *The Crusaders' Kingdom*, 351.

corners between projecting towers and glacis, insuring the defenders' fire could cover the entrances.

Another modification designed to counter bombardment, probably added in 1251, was the construction of Caesarea's rectangular projecting towers. Representing a new style of Crusader architecture in the thirteenth century, these towers, in contrast to the older square models, held up better against the Muslim trebuchets. They also provided sufficient room on their roofs for mounting defensive catapults, a countermeasure designed to discourage Muslim siege engines from coming within firing range.

Caesarea's citadel was Louis' most effective defensive structure. In its day, the Muslims regarded the citadel as the most formidable on the coast. In addition to thwarting Muslim mining attempts, the sturdy construction of the citadel enabled the Crusaders to survive six days of continual bombardment during Baybar's siege of 1265. It served as their last refuge when the rest of the fortification had fallen to Muslim invaders.

Louis' modification to the east and north gates addressed the basic problem of defending the weakest points in the fortification. Besides the posterns, the gates were the only openings in the city walls, providing tempting targets for the attacking army in time of siege. Louis blocked the older gate entrances with Byzantine style gatehouses, incorporating a bent entrance design. This feature prohibited the enemy from easily ramming the city gates. It also provided a trap in which the defenders, armed with boiling oil and pitch in their balcony positions, maintained a decisive advantage over an intruding enemy.

The chronology of Caesarea in the context of the events of the twelfth and thirteenth centuries reveals an unfolding pattern of strategy for survival in the Latin Kingdom of Jerusalem. In the early phase, the Crusaders needed the fortification at Caesarea to help them secure the western frontier, support their economic interests, and control the indigenous population. During this period, the city's strength served both military and non-military interests throughout eighty-six years of prosperity. However, toward the last half of the twelfth century, shortages in Frankish manpower accompanied by the rising tide of Muslim unification altered the balance of power in the Levant. In 1187, Saladin left the Latin Kingdom and the Crusader forces in ruin. Consequently, as the Franks retreated from the field of battle, the fortifications replaced the mounted knights as the sentinels of domination and control. As siege warfare became the dominant arena of military conflict the thirteenth century, the Crusaders' feverish building programs at Caesarea revealed the high priority they placed on walled fortresses to sustain their existence. The ingenuity and careful strategy expressed in stone during the fortification modifications of Louis IX showed a determination, not only to survive, but to combat and thwart the tactics of Muslim siege craft. In this way, the Franks adopted the walled-city as their ultimate weapon and strategy for holding territory in the Latin Kingdom.

CONCLUSION

The inability of the Latins, without major assistance from the west, to create and maintain an effective field army on a permanent basis meant that their strongpoints were crucial to the strategy which they used to defend the Latin East. . . . The continuation of the Latin presence was therefore increasingly reliant on the survival of independent, and isolated, fortified sites. The passive strength of the fortifications relieved some of their problems, but the Latins were unable to defend the borders of their kingdom and their strongpoints were lost, one by one, in a process which would eventually end the Latin settlement.¹

By the end of the thirteenth century, the walls of Caesarea lay in ruin and the territory formerly known as the Kingdom of Jerusalem was firmly under Muslim control. Following Baybars' capture and destruction of Caesarea in 1265, the Crusaders never returned to occupy the site. After the fall of Acre to Sultan al-Ashraf Khalil in 1291, the last Frankish force evacuated Palestine from Caesarea's northern satellite fortification, Château Pèlerin. Despite Baybars' previous destruction efforts, Sultan Khalil returned to Caesarea and the other coastal strongholds to ensure their complete devastation. His men systematically dismantled the fortification walls to prevent Western Europeans from ever returning to establish a foothold in the Levant. Undoubtedly, the sultan realized the strategic value of these fortifications and their vital role in having sustained the Crusaders' prolonged occupation in Palestine.

Despite the destructive efforts of Baybars and Khalil, remnants of Caesarea's

¹ Marshall, *Warfare in the Latin East*, 144.

walls, moats, and towers still stand in testimony to the grand investment of St. Louis and the determination of his Frankish predecessors. Through their conquests and construction of walled fortifications, these Westerners viewed themselves as part of a divine, miraculous undertaking. More than military members, they were social and political engineers, but more importantly, they were emissaries of God seeking to transform the East through a deliberate imposition of European cultural institutions. Their vision to establish a Latin colony in the Levant resembling a Western feudal community qualified them to rank among the first of Europe's grand imperialists. Apart from any preplanned military strategy, religious rhetoric guided their endeavors. Despite severe setbacks, their passion to fulfill God's work accounted for their tireless resolve to fortify and hold the sacred cities in the land of Palestine. Walled fortifications, like Caesarea, with cathedrals and holy places at the heart of their infrastructures, served as the ideological outposts of Christianity and Western culture. As Fulcher of Chartres mused,

Consider, I pray, and reflect how in our time God has transformed the Occident [West] into the Orient.

For we who were Occidentals have now become Orientals. He who was a Roman or a Frank has in this land been made into a Galilean or a Palestinian. . . . He who was born a stranger is now as one born here; he who was born an alien has become as a native. . . .

You see therefore that this is a great miracle and one which the whole world ought to admire. Who has heard anything like it? God wishes to enrich us all. . . . and what is pleasing to Him we do with a loving and submissive heart in order that we may reign with him throughout eternity.²

In the absence of any clearly defined objective, the Crusaders arrived in the Holy Land armed with more fanaticism than military methodology. However, determined to

² Fulcher of Chartres, *Expedition to Jerusalem*, III, 37.

survive, their piecemeal approach toward occupation revealed an unfolding, developing pattern of Latin strategy for survival in the Kingdom of Jerusalem. Outnumbered by a vast indigenous population, they sought to govern a land they could never hope to settle. Although Egypt and Syria posed a significant threat on the kingdom's frontiers, political divisions within and between the Islamic regimes enabled the Franks to expand beyond Jerusalem and establish a formidable presence in the Levant. Caesarea was one of several cities on the Mediterranean seaboard the Crusaders besieged and captured in an effort to secure the western boundary of the kingdom. The Franks especially valued these coastal strongpoints for their strategic and economic advantages. During the first eighty-eight years of Crusader occupation, Caesarea prospered as one of four great fiefs in the realm. The creation of feudal territories around walled cities demonstrated the Crusaders' implementation of the fortress as a center of social and political control. However, by the end of the twelfth century, Muslim unification threatened the borders of the Latin Kingdom. Increasing incursions weakened Frankish defenses and diminished feudal resources vital to the strength of the army. Saladin's devastating invasion in 1187 left Caesarea and most of the kingdom in ruins. In addition, the overwhelming numbers of the Muslim army, combined with the Turks' superior cavalry tactics, disabled the Crusader forces on the battlefield. In response, the Franks retreated to their fortresses, replacing their mounted knights with walls of stone to ensure their survival. Following the failure of his own crusade in Egypt, Louis IX and his extensive refortification efforts at Caesarea in 1251 epitomized this trend. Louis attempted to counter the tactics of Muslim siege craft by adopting innovative architectural features and bolstering the strength of the fortification to repel the besiegers. At the height of its military service,

the fortification itself became an active weapon in the battle for territory. The Crusaders' engineering efforts, although extraordinary, were ultimately incapable of standing against the hurling devices of the enemy. The Muslims concentrated their efforts against the strongholds, fully aware the fortifications represented the Franks' last hope for survival in the Levant.

Caesarea's legacy demonstrates the significance of walled fortifications throughout the history of Crusader occupation in the East. Serving both military and non-military functions, the fortress supported the essential institutions of the Latin Kingdom. During the period of relative prosperity in the twelfth century, Caesarea was a vital center of authority and control, sustaining the social, political, and economic structures of the feudal system of administration. In the thirteenth century, Caesarea became the center of military activity as siege warfare replaced pitched battles. Despite repeated Muslim destruction, the Franks returned to Caesarea to rebuild and occupy in a desperate attempt to defend their foothold in Palestine. Walled fortifications remained the foundation of the Crusader survival strategy throughout their struggle to sustain the Latin Kingdom. The final Muslim conquest of Caesarea and the eventual ruin of all the walled cities adequately demonstrated this point. When the stone walls collapsed, the Kingdom of Jerusalem eroded into oblivion.

BIBLIOGRAPHY

Primary Sources

- Fulcher of Chartres. *A History of the Expedition to Jerusalem, 1095-1127*. trans. Frances Rita Ryan. ed. Harold S. Fink. Knoxville: University of Tennessee Press, 1969.
- Gesta Francorum. *The March to Jerusalem*. in *The First Crusade: The Chronicle of Fulcher of Chartres and Other Source Materials*. ed. Edward Peters. Philadelphia: University of Pennsylvania, 1971.
- Godfrey de Bouillon. *Letter*. in *The First Crusade: The Chronicle of Fulcher of Chartres and Other Source Materials*. ed. Edward Peters. Philadelphia: University of Pennsylvania, 1971.
- Ibn Al-Athir. *X*, 222. in *Arab Historians of the Crusades*. ed. Francesco Gabrielli. Berkeley: University of California, 1984.
- Ibn al-Furat. *Tarikh al-Duwal wa'l-Muluk*. in *Ayyubids, Mamlukes and Crusaders*. trans. U. and M. C. Lyons. Cambridge: W. Heffer and Sons, 1971.
- Jean de Joinville. *The Life of St. Louis*. in *Joinville and Villehardouin: Chronicles of the Crusades*. trans. M. R. B. Shaw. London: Penguin Books, 1963.
- Flavius Josephus. *Antiquities of the Jews and the Jewish War*.
- Raymond d'Aguiliers. *The March to Jerusalem*. in *The First Crusade: The Chronicle of Fulcher of Chartres and Other Source Materials*. ed. Edward Peters. Philadelphia: University of Pennsylvania, 1971.
- Roger of Wendover. *The Crusade of Frederick II*. in *Christian Society and the Crusades, 1198-1229*. ed. Edward Peters. Philadelphia: University of Pennsylvania Press, 1971.
- Vitruvius. *On Architecture*.
- William of Tyre. *A History of Deeds Done Beyond the Sea*. trans. Emily Black and A. C. Krey. New York: Columbia University Press, 1943.

Secondary Sources

- Armstrong, Karen. *Jerusalem: One City, Three Faiths*. New York: Ballentine Books, 1997.
- Benvenisti, Meron. *The Crusaders in the Holy Land*. Jerusalem: Israel Universities Press, 1970.
- Boase, T. S. R. *Kingdoms and Strongholds of the Crusaders*. New York: Bobbs-Merrill, 1971.
- Chambers, Mortimer, et al. *The Western Experience, Vol. III: The Modern Era*. New York: Alfred A. Knopf, 1983.
- Creswell, K. A. C. "Fortification in Islam Before A.D. 1250." *Proceedings of the British Academy*. 38 (1952): 89-125.
- Deschamps, Paul. *Les Chateau des Croises en Terre-Sainte. vol. 2: La Defense du Royaume de Jerusalem*. Paris: Librairie Orientaliste Paul Geuthner, 1939.
- Fedden, Robin & John Thompson. *Crusader Castles*. London: William Clowes and Sons, 1957.
- Gies, Joseph & Frances. *Life in a Medieval Castle*. New York: Harper & Row, 1974.
- Glare, P. G. W. "Sigillum" and "Ciutas." in *The Oxford Latin Dictionary*. 1984.
- Hazard, Harry W. "Caesarea and the Crusades." *Studies in the History of Caesarea Maritima*. ed. Charles T. Fritsch. Bulletin of the American Schools of Oriental Research Supplement Studies 19. Missoula: BASOR, 1975.
- Hill, Donald R. "Trebuchets." *Viator* 4 (1973): 99-114.
- Hogg, Ian. *The History of Forts & Castles*. London: Macdonald & Co, 1988.
- Holum, Kenneth G. *King Herod's Dream: Caesarea on the Sea*. New York: W. W. Norton, 1988.
- Kennedy, Hugh. *Crusader Castles*. Cambridge: Cambridge University Press, 1994.
- LaMonte, John L. "The Lords of Caesarea in the Period of the Crusades." *Speculum*. 22:2 (April 1947): 145-150.

- Lewis, Bernard. *The Arabs in History*. New York: Harper and Row Publishers, 1966.
- Marshall, Christopher. *Warfare in the Latin East, 1192-1291*. Cambridge: Cambridge University Press, 1992.
- Mayer, Hans Eberhard. *The Crusades*. Oxford: Oxford University Press, 1984.
- Meyers, Eric M. "Caesarea." in *The Oxford Encyclopedia of Archaeology in the Near East*. 1997.
- Molin, Kristian. "The Non-Military Functions of Crusader Fortifications, 1187-circa 1380." *Journal of Medieval History*. 23: 4. (Dec 1997): 367-388.
- Negev, Avraham. *Caesarea*. Tel Aviv: E. Lewin-Epstein, 1967.
- Oman, Charles. *A History of the Art of War in the Middle Ages*. vol. 2. London: Greenhill Books. 1991.
- Olami, Yaacov & Yehudah Peleg. "The Water Supply System of Caesarea Maritima." *Israel Exploration Journal*. 27 (1977): 127-137.
- Phillips, Johathan. *Defenders of the Holy Land: Relations Between the Latin East and the West, 1119-1187*. Oxford: Clarendon Press, 1996.
- Phillips, Jonathan. "The Latin East, 1098-1291." *The Oxford Illustrated History of the Crusades*. ed. Jonathan Riley-Smith. Oxford: Oxford University Press, 1995. 112-140.
- Prawer, Joshua. *Crusader Institutions*. Oxford: Clarendon Press, 1980.
- Prawer, Joshua. *The Crusaders' Kingdom: European Colonialism in the Middle Ages*. New York: Praeger Publishers, 1972.
- Pringle, Denys. "Crusader Castles: The First Generation." *Fortress* 1 (May 1989): 14-25.
- Pringle, Denys. introduction to *Crusader Castles* by T. E. Lawrence. Oxford: Clarendon Press, 1988.
- Pringle, Denys. *Secular Buildings in the Crusader Kingdom of Jerusalem: An Archaeological Gazetteer*. Cambridge: Cambridge University Press, 1997.

- Pringle, Denys. *The Defence of Byzantine Africa From Justinian to the Arab Conquest: An Account of the Military History and Archaeology of the African Provinces in the Sixth and Seventh Centuries*. Part 1. British Archaeological Reports International Series 99. Oxford: BAR, 1981.
- Pringle, Denys. *The Red Tower: Settlement in the Plain of Sharon at the Time of the Crusaders and Mamluks, AD 1099-1516*. London: British School of Archaeology in Jerusalem, 1986.
- Pryor, John H. *Geography, Technology, and War: Studies in the Maritime History of the Mediterranean, 649-1571*. Cambridge: Cambridge University Press, 1988.
- Raban, Avner. "...Two Harbors for Two Entities." in *Caesarea Papers: Straton's Tower, Herod's Harbour, and Roman and Byzantine Caesarea*. ed. Robert L. Vann. Journal of Roman Archaeology Supplementary Series 5. Ann Arbor: University of Michigan, 1992. 68-74.
- Raban, Avner. "In Search of Strato's Tower." in *Caesarea Papers: Straton's Tower, Herod's Harbour, and Roman and Byzantine Caesarea*. ed. Robert L. Vann. Journal of Roman Archaeology Supplementary Series 5. Ann Arbor: University of Michigan, 1992. 7-22.
- Raban, Avner and Kenneth G. Holum. *Caesarea Maritima: A Retrospective after Two Millennia*. New York: E. J. Brill, 1996.
- Reifenberg, A. "Caesarea: A Study in the Decline of a Town." *Israel Exploration Journal* 1 (1950): 20-32.
- Riley-Smith, Jonathan. *The Crusades: A Short History*. London: Yale University Press, 1987.
- Riley-Smith, Jonathan. "The Motives of the Earliest Crusaders and the Settlement of Latin Palestine, 1095-1100." *The English Historical Review* 98 (Oct 1983): 720-736.
- Rogers, R. *Latin Siege Warfare in the Twelfth Century*. Oxford: Clarendon Press, 1992.
- Runciman, Steven. "Pilgrimages." in *A History of the Crusades*. ed. Kenneth M. Setton. vol. 1. Madison: University of Wisconsin Press, 1977. 67-87.
- Smail, R. C. *Crusading Warfare, 1097-1193*. Cambridge: Cambridge University Press, 1995.
- Stern, Ephraim, ed. "Caesarea." in *The New Encyclopedia of Archaeological Excavations in the Holy Land*. 1993.

Strayer, Joseph R., ed. "Fulcher of Chartres" and "William of Tyre." in *Dictionary of the Middle Ages*. 1989.

Tanner, J. R., ed. *The Cambridge Medieval History*. vol. 5. Cambridge: Cambridge University Press, 1968.

Van Donzel, E., ed. "Kaysariyya." in *The Encyclopedia of Islam*. 1978.

Vann, Robert L. "Early Travelers and the First Archaeologists." in *Caesarea Papers: Straton's Tower, Herod's Harbour, and Roman and Byzantine Caesarea*. ed. Robert L. Vann. *Journal of Roman Archaeology Supplementary Series* 5. Ann Arbor: University of Michigan, 1992. 275-290.

Verbruggen, J. F. *The Art of Warfare in Western Europe During the Middle Ages: From the Eighth Century to 1340*. trans. Sumner Willard and S. C. M. Southern. Amsterdam: North-Holland Publishing Company, 1977.